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# PROGRAM

# Third World Congress of Environmental and Resource Economists Kyoto International Conference Hall, Kyoto, Japan July 3-7, 2006

第3回環境経済学世界大会 2006年7月3日(月)~7日(金) 京都国際会館 ●大会組織委員会委員長 佐和陽光(京都大学経済研究所) ● お問い合わせ/Mail wc3-infe@congre.co.jp http://www.worldcongress3.org/

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### WELCOME TO THE THIRD WORLD CONGRESS

Ladies and Gentleman, we would like to celebrate the fact that so many people have joined the World Congress. The World Congress of Environmental and Resource Economists first convened in Venice, in 1998, with the aim of becoming a place for global communication among economists concerned about environmental/resource issues and policies. The Congress has met every four years since that time, the second was in Monterey, in 2002, and this year it has assembled here in Kyoto - the first gathering to be held outside Europe and the United States. As the first Congress to be held in Asia, there has been a strong increase in the number of participants from Asian countries as well as those from non-Western regions, and a total of more than 60 countries are now represented. We would like to celebrate, with all of you, an event that has literally become a "World" Congress.

Humanity is faced with the question of how to realize the sustainable development of society. We have, for instance, to find an intragenerational and intergenerational equitable solution to the issue of climate change. What do we have to do in order to transition into a sustainable society? The development of Environmental and Resource Economics will contribute to the solution to such profound questions. It is suggestive that this Congress is being held in Kyoto, the place where the Kyoto Protocol was adopted.

It is our hope that through an active exchange of ideas, the participants will be able to deepen their interactions, so the world may see that our efforts can contribute to the development of a sustainable society. We also urge you to enjoy the city of Kyoto, one of the most beautiful cities in the world. In closing, we would like to thank all those involved in the preparation of this event, and celebrate its success.

Richard Carson President, AERE

Anastasios Xepapadeas President, EAERE

Kazuhiro Ueta President, SEEPS

### **GREETINGS FROM LOCAL ORGANIZING COMMITEE**

It gives us immense pleasure and a sense of honor to be able to organize the 3rd World Congress of Environmental and Resource Economists. As is well known, the 3rd Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC: COP3) was held in Kyoto in December 1997. We really appreciate your effort in making the long journey to Kyoto.

What kind of a century was the 20th century? One plausible answer to this question might be to say that it was a century of economic development and growth. The rapid economic development during the 20th century could be attributed to the series of technological innovations that occurred during this period. The reason why these technological innovations occurred in such rapid succession is that human beings had discovered two sources of energy: electric power and oil. Therefore, the 20th century can be considered as the century of electric power and oil. From another perspective, it naturally follows that the 20th century was the century of carbon dioxide emissions. We were able to attain such rapid economic growth in the last century by rapidly increasing the level of  $CO_2$  emissions. It is quite significant that the Kyoto Protocol obliging developed countries to reduce  $CO_2$  emissions was adopted toward the end of the last century, the century of  $CO_2$  emissions.

The 21st century is quite often said to be the century of the environment. This has two implications. First, the global environmental problem will become so serious that it will threaten the very existence of human beings. Second, since innovation is one of the necessary conditions for economic growth, the challenges that we face in preserving the environment are expected to serve as a new driving force to accelerate economic growth.

We are extremely hopeful that the Congress will be carried out successfully. We also hope that you will enjoy the beautiful city of Kyoto as much as the Congress itself. Finally, let me express our sincere gratitude to the concerned government agencies, Kyoto prefecture, Kyoto city, the Kyoto Chamber of Commerce and Industry, and the Integrated Research System of Sustainability Science at the University of Tokyo for their support. We are also grateful for the donations received from private companies, whose names are listed in the program.

Takamitsu Sawa Chair, Local Organization Committee

### **CONGRESS SPONSORS**

The Third World Congress of Environmental and Resource Economists is sponsored by JSPS (Japan Society for the Promotion of Science) International Meeting series Asahi Glass Foundation, and INAMORI FOUNDATION, which are gratefully acknowledged.

We acknowledge that contributions by companies and organizations helped the Congress very much. Contributors include;

Canon Inc. Central Japan Railway Company Central Research Institute of Electric Power Industry Heiwa Corporation Honda Motor Co., Ltd. Japan Automobile Manufacturers Association, Inc. Japanese Consumers' Co-operative Union JFE Steel Corporation JT KAJIMA CORPORATION **KDDI CORPORATION KYOCERA** Corporation Matsushita Electric Industrial Co., Ltd. Mitsubishi Corporation Mitsubishi Heavy Industries, Ltd. MITSUBISHIESTATE CO., LTD. Mizuho Financial Group MURATA MACHINERY,LTD. Murata Manufacturing Co., Ltd. **NEC** Corporation Nomura Holdings, Inc. NWD method Assoc. **OBAYASHI CORPORATION** Ricoh Co., Ltd. SHIMADZU CORPORATION SHISEIDO CO., LTD.

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21st Century COE Program "Social Capacity Development for Environmental Management and International Cooperation" by Graduate School for International Development and Cooperation of Hiroshima University, 21st Century COE Program "Interfaces for Advanced Economic Analysis" Graduate School of Economics of Kyoto University, Mizuho Financial Group, and Nomura Holdings, Inc. provided support for sessions at the Congress. We gratefully acknowledge this.

We also appreciate Integrated Research System for Sustainability Science, Kyoto Prefecture, Kyoto City, and Kyoto Chamber of Commerce and Industry for their support to the Global Environmental Policy Panel.

Swedish International Development Cooperation Agency contributed to funds, which made it possible to provide scholarships to 50 Congress participants from the developing and emerging economies, and young scholars from developed countries.

Last but not least, we would like to thank all individuals who generously made contributions to the fund of the Congress.

### **CONGRESS COMMITTEES**

### LOCAL ORGANIZING COMMITTEE

Chair: Takamitsu Sawa, Ritsumeikan University Vice-Chair: Kazuhiro Ueta, Kyoto University

### Members:

Akihiro Amano, University of Hyogo Naoto Asano, Fukuoka University Jusen Asuka, Tohoku University Takehisa Awaji, Rikkyo University Noriyuki Goto, The University of Tokyo Koichi Hasegawa, Tohoku University Eiji Hosoda, Keio University Hidefumi Imura, Nagoya University Yasuko Kameyama, National Institute for Environmental Studies Katsuhiko Kokubu, Kobe University Hidefumi Kurasaka, Chiba University Koichi Kuriyama, Waseda University Nozomu Matsubara, Sophia University Shunji Matsuoka, Hiroshima University Yuzuru Matsuoka, Kyoto University Kenichi Miyamoto, Osaka City University Yuichi Moriguchi, National Institute for Environmental Studies Toru Morotomi, Kyoto University Takeshi Murota, Doshisha University Shinichiro Nakamura, Waseda University Hidenori Niizawa, University of Hyogo Shuzo Nishioka, National Institute for Environmental Studies Toshihiro Oka, Fukui Prefectual University Ayumi Onuma, Keio University Tadashi Otsuka, Waseda University Hirofumi Shibata, Osaka University Yukari Takamura, Ryukoku University Kenji Takeuchi, Kobe University

Shun'ichi Teranishi, Hitotsubashi University Tsunekazu Toda, Hiroshima University Jun Ui, University of Okinawa Yoko Wake, Keio University Toyoaki Washida, Sophia University Hiroyoshi Yabe, Chuo University Fumikazu Yoshida, Hokkaido University

### Extended Members:

Kota Asano, Kyoto University Seiji Ikkatai, Kyoto University Yuzuru Matsuoka, Kyoto University Kazuo Matsushita, Kyoto University Kenichi Oshima, Ritsumeikan University Chieko Umetsu, Research Institute for Humanity and Nature

### **PROGRAM COMMITTEE**

### Co-chairs:

Hossein Farzin, University of California, Davis Michael Rauscher, University of Rostock Kazuhiro Ueta, Kyoto University

### Members:

Ken-Ichi Akao, Waseda University Savas Alpay, Bilkent University Gregory Amacher, Virginia Polytechnic Institute and State University Toshi Arimura, Sophia University Kanemi Ban, Osaka University Sangeeta Bansal, Jawaharlal Nehru University Edward Barbier, University of Wyoming Jeff Bennett, Australian National University Antonio Bento, University of Maryland Christoph Böhringer, Centre for European Economic Research Runar Brännlund, Umeå University Lucas Bretschger, ETH Zürich Wolfgang Buchholz, University of Regensburg Erwin Bulte, University of Tilburg Brita Bye, Statistics Norway Robert Cairn, McGill University Trudy Ann Cameron, University of Oregon Michael Caputo, University of Central Florida Carlo Carraro, University of Venice Richard Carson, University of California, San Diego Ujjayant Chakravorty, University of Central Florida Graciela Chichilnisky, Columbia University Klaus Conrad, University of Mannheim Jon Conrad, Cornell University Brian Copeland, University of British Columbia Christopher Costello, University of California, Santa Barbara Maureen Cropper, University of Maryland Ichiroh Daitoh, Tohoku University

Aart de Zeeuw, University of Tilburg Varadarajan Dhulasibirundha, Madurai Kamaraj University Essi Eerola, University of Helsinki Marta Escapa, University of the Basque Country Johan Eyckmans, Catholic University Leuven Hossein Farzin, University of California, Davis Linda Fernandez, University of California, Riverside Michael Finus, University of Hagen Anthony Fisher, University of California, Berkeley Per Fredriksson, University of Louisville Kiyoshi Fujikawa, Konan University Toshiyuki Fujita, Kyushu University Marzio Galeotti, University of Milan Lata Gangadharan, University of Melbourne Gérard Gaudet, Université de Montréal Timo Goeschl, University of Heidelberg Rolf Golombek, Frisch Centre Quentin Grafton, Australian National University Clive Granger, University of California, San Diego Mitsutsugu Hamamoto, Dokkyo University John Hartwick, Queen's University Rashid Hassan, University of Pretoria Geoffrey M. Heal, Columbia Business School Anthony Heyes, University of London Yolande Hiriart, University of Toulouse Michael Hoel, University of Oslo Karin Holm-Müller, University of Bonn Eiji Hosoda, Keio University Richard Howitt, University of California, Davis Yasuko Kameyama, National Institute for Environmental Studies Yoshiaki Kaoru, Nanzan University Yukichika Kawata, Keio University Claudia Kemfert, DIW Berlin Meeta Keswani Mehra, Jawaharlal Nehru University Seung-Rae Kim, Korea Institutue of Public Finance

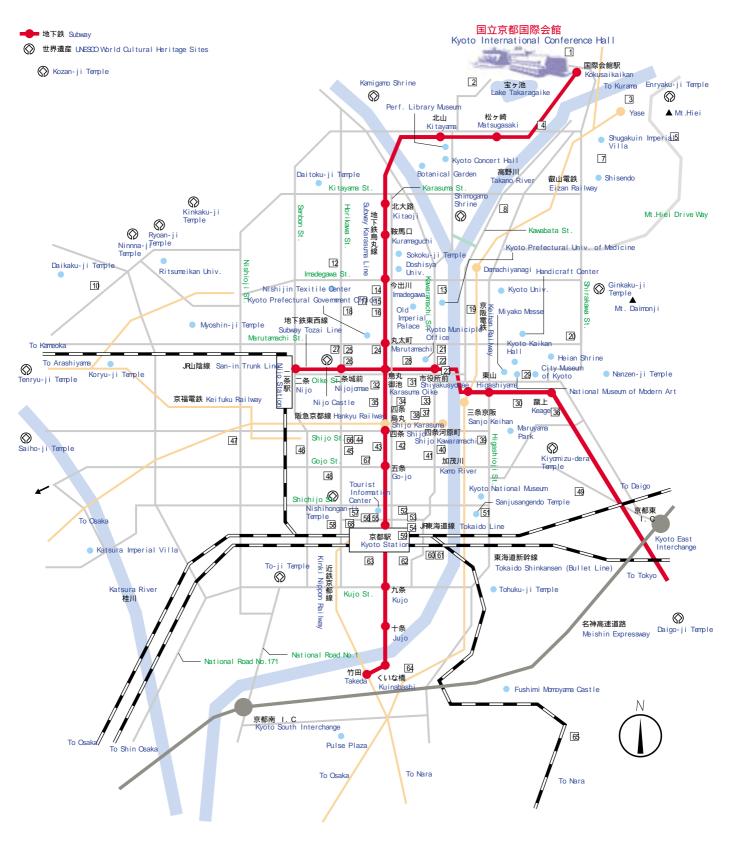
Technology Catherine Kling, Iowa State University Charles Kolstad, University of California, Santa Barbara Bengt Kriström, Swedish University of Agricultural Sciences Koichi kuriyama, Waseda University Andreas Lange, University of Maryland Alessandro Lanza, Fondazione Eni Enrico Mattei Matti Liski, Helsinki School of Economics John List, Chicago University John Livernois, University of Guelph Karl-Gustav Löfgren, University of Umeå Ngo Van Long, McGill University John B. Loomis, Colorado State University Akira Maeda, Kyoto University Arun S. Malik, George Washington University Shunsuke Managi, Yokohama National University Anil Markandya, University of Bath Chuck Mason, University of Wyoming John Maxwell, Indiana University Carol McAusland, University of Maryland Katrin Millock, Centre d'Economie de la Sorbonne Juan Pablo Montero, Pontificia Universidad Católica de Chile Yuichi Moriguchi, National Institute for Environmental Studies Toru Morotomi, Kyoto University Takeshi Murota, Doshisha University Richard Newell, Resources For the Future Kazuhiko Nishimura, Nihon Fukushi University Karine Nyborg, Frisch Centre Toshihiro Oka, Fukui Prefectural University Markku Ollikainen, University of Helsinki Noemi Padron, University of La Laguna Hojeong Park, Chonnam National University Ian W. H. Parry, Resources for the Future Wolfgang Peters, University Viadrina Rüdiger Pethig, University of Siegen Jack Pezzey, Australian National University

Nguyen-Van Phu University of Cergy-Pontoise William Pizer, Resources for the Future Steve Polasky, University of Minnesota Stef Proost, Catholic University of Leuven Michael Rauscher, Universitaet Rostock Till Requate, University of Kiel John Rolfe, Central Queensland University Santiago Rubio, University of Valencia Effichios Sartzetakis, University of Macedonia Armin Schmutzler, University of Zürich Silvia Secchi, Iowa State University Ronaldo Seroa da Motta, Institution of Applied Economics Research Basil Sharp, Unversity of Auckland Mordechai Shechter, University of Haifa Shinichi Shogenji, University of Tokyo Jason Shogren, University of Wyoming Hilary Sigman, Rutgers University Bernard Sinclair-Desgagnié, HEC Montréal Kerry Smith, North Carolina State University Sjak Smulders, University of Tilburg Robert Stavins, Harvard University Urs Steiner-Brandt, University of Southern Denmark Karl Steininger, University of Graz Thomas Sterner, University of Göteborg Olli Tahvonen, Finnish Forest Research Institute Kenji Takeuchi, Kobe University Shunichi Teranishi, Hitotsubashi University Kazuhiro Ueta, Kyoto University Jeroen van den Bergh, Free University Amsterdam Ekko van Ierland, Wageningen University Jeffrey Vincent, University of California, San Diego Herman Vollebergh, Tinbergen Institute Heinz Welsch, University of Oldenburg Quinn Weninger, Iowa State University Hege Westskog, CICERO Franz Wirl, University of Vienna

Cees Withagen, University of Tilburg Janjee Wu, Oregon State University Hidetoshi Yamashita, Hitotsubashi University Seung Jik Yoo, Korea Energy Economics Institute Kentaro Yoshida, Tsukuba University Jinhua Zhao, Iowa State University Tomas Zylicz, University of Warsaw

### LIASON MEMBERS

Jason Shogren, University of Wyoming (AERE) Monica Eberle, Fondazione Eni Enrico Mattei (EAERE) Zulma Guzman, Corporación Autónoma Regional de Cundinamarca (ALEAR)



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- 5 LHotelde Hiei
- 7 KansaiSem nar House 8 Holiday Inn Kyoto
- 10 Utano Youth Hostel
- 12 Kyoto City Hotel
- 13 Mikuruma Kaikan
- 14 Heian Kaikan
- 15 Kyoto Garden Palace
- 16 HotelPalace-side Kyoto
- 17 Kyoto Brighton Hotel
- 18 Rubino Kyoto Horikawa
- 19 KyodaiKaikan

- 22 Kyoto Hotel
- 23 Kyoto RoyalHotel
- 24 HotelHarvest Kyoto
- 25 InternationalHotelKyoto
- 26 ANA Hote I Kyoto
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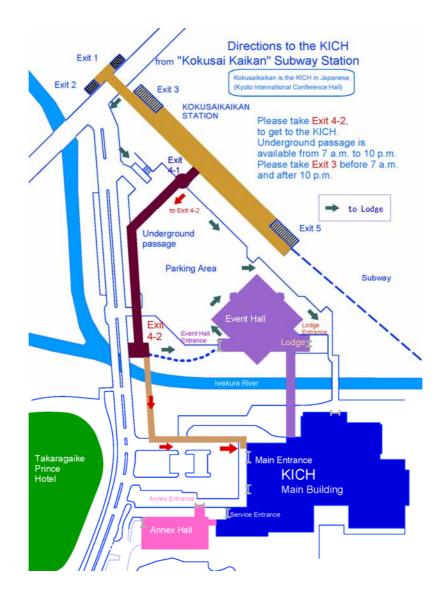
### **CONGRESS INFORMATION**

### DATES

Monday, July 3rd - Friday, July 7th, 2006

### VENUE

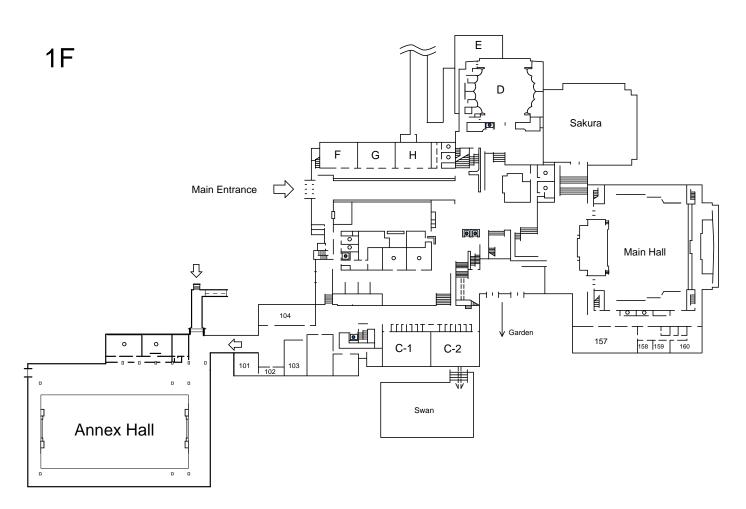
Kyoto International Conference Hall (KICH) Takaragaike, Sakyo-ku, Kyoto 606-0001, Japan Phone: + 81-75-705-1234 (Domestic: 075-705-1234) Fax: + 81-75-705-1100 (Domestic: 075-705-1100)



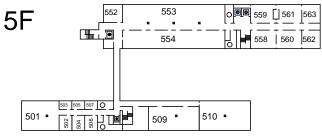
## KYOTO INTERNATIONAL CONFERENCE HALL

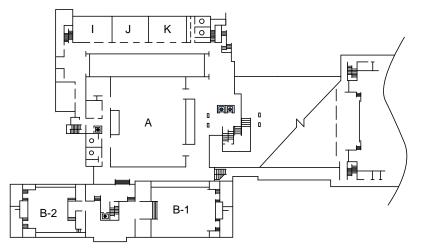
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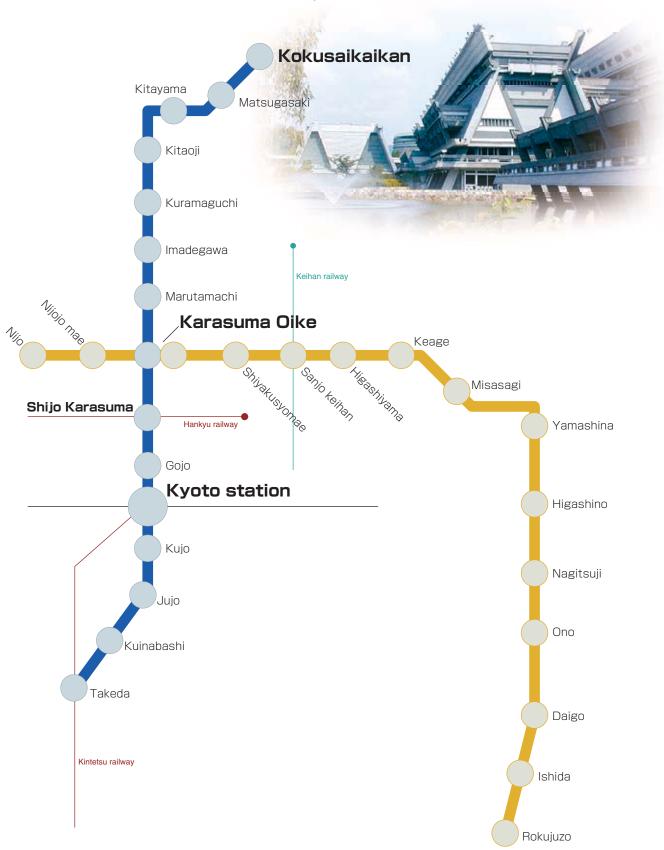
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### **()** Kyoto International Conference Hall

### LANGUAGE

The official language of the congress is English. There will be no simultaneous interpretation provided. However, simultaneous interpretation of Japanese and English will be provided at Opening Ceremony and Global Environmental Policy Panel on Tuesday, 4th July.

### **CONGRESS SECRETARIAT**

The Congress Secretariat is located on the 1st floor of KICH in Room 157.

### **IDENTIFICATION BADGE**

The personal name badges will be provided at the registration desk. Please wear your badge for identification purposes for admission to the various functions. The badge provides access to plenary and parallel sessions, welcome reception, gala dinner, opening ceremony, social events, lunch, and coffee. Accompanying Persons' badge enables them to gain access to welcome reception, gala dinner, opening ceremony, and social events.

### **EXHIBITIONS**

Private Companies, Organizations, Governments, and Publishers are exhibiting their activities during the Congress.

Dates &	Times:	Tuesday July 4th	8:45-17:00
		Wednesday July 5th	8:45-17:00
		Thursday July 6th	8:45-17:00
		Friday July 7th	8:45-16:00
Venue:	Annex	Hall of KICH	

### **BUSINESS CENTER**

Payable services will be available on the first floor of KICH.

### **INTERNET SERVICES**

Wireless LAN will be available at Main Lounge on the first floor. There will be no computers or other equipments so please prepare yourself.

Wireless LAN: IEEE802.11b/g SSID: freespot

ID and Password(WEP) are not required.

### **TELEPHONE SERVICES**

Pay telephones and fax machine are available on the 1st floor of KICH.

### **TOUR DESK**

Japan Travel Bureau, Inc. (JTB) will be present daily at a tour desk on the 1st floor of KICH.

### **CLOAK ROOM**

Cloak rooms are located near the main entrance and next to the grill on the 1st floor of KICH.

### REFRESHMENTS

Refreshments are available during the Coffee break where in the morning at 10:30-11:00 (on July 4th, 11:00-11:30) and in the afternoon at 15:45-16:15 (on July 4th, there is no afternoon Coffee break).

### LUNCH

Lunch will be provided each day in the form of a choice of box lunches. The box lunches are available to be picked up at 13:00 on July 4th and 12:30 on July 5th to 7th, on 1st floor of KICH in Sakura, Swan, and Annex Hall.

### AUDIO VISUAL EQUIPMENTS FOR PRESENTATIONS

A Windows laptop computer, projector, and switching device will be provided in each room. Please bring your laptop computer or your presentation file on the CD or USB memory stick. We would like to recommend you to use your own computer, because we are afraid of troubles such as unreadable characters and so on so forth. Up to seven machines can be connected with our switching device simultaneously. And hence, please bring a backup of your presentation file.

When you bring your file on the CD or USB memory stick and use a computer already equipped in your session room, please prepare your presentation in Microsoft PowerPoint or PDF file. We only supply fonts that are included in the base installation of Windows; fonts other than these should be embedded into your file. The fonts we suggest you to utilize are Times New Roman or Arial. If you use a Macintosh computer, we require to bring your own computer by yourself.

An overhead projector will not be equipped in each room, but just for emergency we will prepare a few overhead projectors. Therefore, we recommend you to bring transparency backups of your presentation to prepare for rare but possible cases that the CD or USB memory does not work by accident.

Please arrive at your session room at least 30 minutes before the beginning time of your session, in order to make it sure that your file or computer prepared for presentation will not meet unexpected machinery troubles. If you need any assistance beforehand, please feel free to ask a computer operator in each room.

### **SOCIAL ACTIVITIES**

### WELCOME RECEPTTION

Date & Time: Monday July 3rd, 18:00-20:00 Venue: Sakura on the 1st floor of KICH

### **GALA DINNER**

The gala dinner invites special guests and contains Noh performance (a classical Japanese art form with drama, music, and dance – it has history about 600 years and is colored with the graceful effect of quiet elegance).

Date & Time: Wednesday July 5th, 18:30-20:30 Venue: Swan and Garden on the 1st floor of KICH

# SOCIAL EVENT: AN EVENING WITH TRADITIONAL JAPANESE SUMMER NIGHT ENTERTAINMENT

This social event is full of casual entertainment that you can experience the atmosphere of Japanese summer night. Drinks and light foods are served. Come as you are.

Date & Time: Thursday July 6th, 19:00-21:00 Venue: Swan on the 1st floor of KICH

### PROGRAM AT A GLANCE

### Monday 3 July 2006

18:00 - 19:30 Welcome Reception

### Tuesday 4 July 2006

08:30 - 09:15	Opening of the World Congress
09:30 - 11:00	Plenary Session
11:00 - 11:30	Coffee Break
11:30 - 13:00	Parallel Sessions 01
13:00 - 14:30	Lunch
	ERE Editorial Board Meeting
14:30 - 16:15	Parallel Sessions 02
16:30 - 18:30	Global Environmental Policy Panel

### Wednesday 5 July 2006

08:45 - 10:30	Parallel Sessions 03
10:30 - 11:00	Coffee Break
11:00 - 12:30	Plenary Session
12:30 - 14:00	Lunch
	EAERE General Assembly of Members
14:00 - 15:45	Parallel Sessions 04
14:00 - 15:45 15:45 - 16:15	Parallel Sessions 04 Coffee Break
1.100 101.10	

18:30 – 20:30 Gala Dinner

### Thursday 6 July 2006

08:45 - 10:30 Parallel Sessions 06
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- 10:30 11:00 Coffee Break
- 11:00 12:30 Plenary Session
- 12:30 14:00 Lunch

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AERE General Assembly
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- 14:00 15:45 Parallel Sessions 07
- 15:45 16:15 Coffee Break
- 16:15 18:00 Parallel Sessions 08
- 19:00 21:00 Social Event: An Evening with Traditional Japanese Summer Night Entertainment

### Friday 7 July 2006

08:45 - 10:30	Parallel Sessions 09
10:30 - 11:00	Coffee Break
11:00 - 12:30	Plenary Session
12:30 - 14:00	Lunch
	EDE Editorial Board Meeting
14:00 - 15:45	Parallel Sessions 10
15:45 - 16:15	Coffee Break
16:15 - 18:00	Parallel Sessions 11

### SPEAKERS OF PLENARY SESSIONS

### **Elinor Ostrom**

Arthur F. Bentley Professor of Political Science Co-Director, Workshop in Political Theory and Policy Analysis; Indiana University

Education: Ph.D. Political Science, UCLA

Appointments: Indiana University since 1965

**Fields of Interest:** Environmental policies, Collective choice theory, Institutional analysis, Irrigation and forest Institutions

**Honors:** James Madison Award, APSA; Sustainability Science Award, ESA; John J. Carty Award, NAS; Johan Skytte Prize, University of Uppsala; Frank E. Seidman Award in Political Economy. Member, NAS; American Academy of Arts and Sciences Honorary doctorates from University of Zurich; Institute of Social Studies, The Hague; Luleå University; Sweden; University of Michigan

### **Major Publications:**

#### **Books**

Understanding Institutional Diversity, Princeton University Press, Princeton, NJ, 2005.

*The Samaritan's Dilemma*, with Clark Gibson, Krister Andersson, and Sujai Shivakumar, Oxford University Press, 2005.

Seeing the Forest and the Trees, with Emilio Moran, MIT Press, Cambridge, MA, 2005.

Governing the Commons: The Evolution of Institutions for Collective Action, Cambridge University Press, 1990.

### <u>Articles</u>

- "The Struggle to Govern the Commons," with Tom Dietz and Paul Stern, *Science*, 2003, Vol. 302, pp. 1907-1912.
- "Collective Action and the Evolution of Social Norms," *Journal of Economic Perspectives*, 2000, Vol. 14, pp. 137-158.
- "A Behavioral Approach to the Rational Choice Theory of Collective Action," *American Political Science Review*, 1998, Vol. 92, pp. 1-22.



### **Abstract of Speech:**

### "Monitoring Makes a Difference: Formal Property Rights to Forests are Ineffective Unless Officials *or* Users Invest in Them"

Policy analysts frequently presume that rampant deforestation occurs unless governments own and protect forests, build strong fences, and employ guards. Formal rules assigning governmental ownership of forested land without substantial investments in protection is associated with deforestation and illegal harvesting. Empirical studies confirm deforestation of unprotected forests, but also provide surprising evidence that users, who view forest rules as legitimate and of long-run benefit, may also monitor conformance to property-rights systems. Theoretical analyses of collective-action dilemmas predict that users are trapped and are unable to create effective rules in the first place. It is thus even more surprising to find users willing to solve "second-order collective-action problems" involving monitoring and sanctioning of rule Evidence from field studies of diverse forest regimes will be presented to examine systems. the effect of formal rules with and without monitoring by guards, users, or both types of actors. To begin an explanation of why, and under what conditions, users will themselves undertake costly monitoring activities, a series of laboratory experiments will be discussed. In these common-pool resource experiments, users overharvest as expected when no rules are in effect. Communication among users, especially repeated communication, makes a substantial difference. Even more dramatic is the impact of allowing users to make their own rules and enforce them. Resource users can solve more collective-action problems than current theory recognizes, but it is essential for policy analysts to avoid presuming that "turning forests over" to local users is a new panacea. Building effective property-rights regimes requires time and effort to create systems well-matched to local ecologies and social structures.

### Sir Clive W.J. Granger

Nobel Laureate and Professor Emeritus University of California, San Diego

**Education:** Ph.D., University of Nottingham, 1959 BA, University of Nottingham, 1955



### **Previous Appointments:**

Professor of Economics, University of California, San Diego, 1974-2003 Professor of Economics, University of Nottingham, 1959-1974

### **Fields of Interest:**

Statistics and econometrics (especially time series analysis), forecasting, finance, methodology.

### **Honors:**

The Bank of Sweden Prize in Economic Sciences in Memory of Alfred Nobel (The Nobel Prize for Economics), 2003 Doctor Honoris Causa, Aarhus University, July 2003 Corresponding Fellow, British Academy, July 2002 President, Western Economic Association, 2002-2003 Distinguished Fellow, American Economic Association, 2002 Honorary D.Sc. Degree, University of Loughborough, 2002 Biennial Medal, Modeling and Simulation Society of Australia and New Zealand, 2001 Doctor Honoris Causa, Stockholm School of Economics, 1998 Foreign Member, Finnish Society of Arts and Science, 1997 Fellow, International Institute of Forecasters (Inaugural Group of Four), 1996 Doctor Honoris Causa, Universidad Carlos III de Madrid, 1996 Fellow, American Academy of Arts and Sciences, 1994 Chancellor's Associates Chair in Economics, 1994 Honorary D.Sc. Degree, University of Nottingham, 1992 Commonwealth Fellowship of the Harkness Funds, New York, held 1959-60 at Princeton University, New Jersey. Fellow of the Econometric Society, 1972

Elected Guggenheim Fellow from January to June, 1988.

Listed in "Who's Who in the United States," "Who's Who in the World," "Who's Who" London Paper "Forecasting Stock Market Prices: Lessons for Forecasters"

chosen by editors of International Journal of Forecasting as best paper in years 1992/1993

### **Major Publications:**

### Books:

*Spectral Analysis of Economic Time Series*, in association with M. Hatanaka, Princeton University Press, October 1964. (French translation: "Analyze spectrale des series temporelles en economie," Dunod, Paris 1969.)

Designated a "Citation Classic" by the publishers of Citation Review, 1986.

*Predictability of Stock Market Prices*, with O. Morgenstern, Heath and Co., Lexington, MA., November 1970.

*Forecasting Economic Time Series*, with Paul Newbold, Academic Press, March 1977. Second edition, October, 1986.

### Articles:

"Testing for causality, a personal viewpoint," *Journal of Economic Dynamics and Control*, 2, 1980, 329-352.

"Co-integration and error-correction: representation, estimation, and testing," with R. Engle, *Econometrica*, 55, 1987, 251-76.

### **Summary of Speech:**

The lecture expands the discussion contained in the book "The Dynamics of Deforestation and Economic Growth in the Brazilian Amazon" by L. Andersen, etc. (Cambridge University Press, 2002) to consider the impacts of policy. The major types of policy are economic and legal, and the second of these depends on the amount of regulation used. Policy models have to be dynamic and so panel models are most appropriate as the effects of a policy will vary with time.

The paper discusses the major causes of deforestation, logging and settlers, and how policy effects as measured by models.

However, the implications are not necessarily that settlements should be discouraged and new roads banned as such policies may go against the requirements of the society.

### **Stephen Polasky**

Fesler-Lampert Professor of Ecological/Environmental Economics, University of Minnesota

### **Prior Positions:**

Senior Staff Economist, President's Council of Economic Advisers, 1998 - 1999 Associate Professor, Agricultural and Resource Economics

Oregon State University, 1993 - 1999

### **Prior Positions:**

Department,

Senior Staff Economist, President's Council of Economic Advisers, 1998 - 1999 Associate Professor, Agricultural and Resource Economics Department,

Oregon State University, 1993 - 1999

Assistant Professor, Economics Department, Boston College, 1986 – 1993

**Fields of Interest:** biodiversity conservation, integrating ecology and economics, ecosystem services, common property resources, game theory

### **Major Publications:**

- Polasky, S., E. Nelson, E. Lonsdorf, P. Fackler and A. Starfield. 2005. Conserving species in a working landscape: land use with biological and economic objectives. *Ecological Applications* 15(4): 1387-1401.
- Polasky, S., C. Costello and A. Solow. 2005. The economics of biodiversity. In *The Handbook of Environmental Economics*, Vol III. J. Vincent and K.-G. Maler (eds.).
- Tilman, D., S. Polasky and C. Lehman. 2005. Diversity, productivity and temporal stability in the economies of humans and nature. *Journal of Environmental Economics and Management* 49(3): 405-426.
- Polasky, S. (ed.). 2002. The Economics of Biodiversity Conservation. Ashgate Publishing Limited.
- Camm. J.D., S.K. Norman, S. Polasky and A.R. Solow. 2002. Nature reserve selection to maximize expected species coverage. *Operations Research* 50(6): 946-955.
- Ando, A., J. Camm, S. Polasky and A. Solow. 1998. Species distributions, land values, and efficient conservation. *Science* 279: 2126-2128.
- Polasky, S. and H. Doremus. 1998. When the truth hurts: endangered species policy on private



land with imperfect information. *Journal of Environmental Economics and Management* 35(1): 22-47.

Solow, A., S. Polasky and J. Broadus. 1993. On the measurement of biological diversity. *Journal of Environmental Economics and Management* 24(1): 60-68.

### Summary of Speech: Biodiversity Conservation and Ecosystem Services

The Earth Summit in Rio de Janeiro in 1992 adopted the Convention on Biological Diversity and the United Nations Convention on Climate Change. Since that time, the climate change issue has held center stage in environmental policy and economics arenas and the Climate Change Convention led to the Kyoto Protocol that set greenhouse gas emissions targets for some countries. Conserving biological diversity has not gained nearly as much attention as climate change in policy or in economics and The Convention on Biological Diversity has languished in relative obscurity, despite the vital importance of the issue.

The loss of biodiversity affects human welfare as well as being lamentable for its own Humans depend on natural systems to produce a wide variety of ecosystem services, sake. ranging from direct use of certain species for food or medicines to ecosystem functions that provide water purification, nutrient retention or climate regulation. But human actions threaten biodiversity, in the form of habitat loss and fragmentation, the introduction of exotic species, over-harvesting, pollution, changes in geochemical cycles and climate change. Because biodiversity is at risk in large part because of human activity, finding ways to conserve biodiversity will come from better understanding and management of human affairs, not from better biology alone. Economists have an important role to play in helping to develop and evaluate conservation strategies. Economists can help set priorities to allocate scarce conservation resources, to design incentive schemes to make conservation policy both effective and efficient, and to shed light on what are the most valuable components of biodiversity, including analysis of species existence value, the value of bioprospecting and the value of ecosystem services. This talk will review the expanding economics literature on biodiversity and ecosystem services and lay out several pressing research challenges.



### **Geoffrey Heal**

Geoffrey Heal, Paul Garrett Professor of Public Policy and Corporate Responsibility at Columbia Business School and Professor of Economics in the School of International and Public Affairs, is noted for contributions to economic theory and environmental economics. Author of fourteen books and about two hundred articles, he is a Fellow of the Econometric Society, Past President of the Association of Environmental and Resource Economists, recipient of its prize for publications of enduring quality, a member of the Scientific Advisory Board of the Environmental Protection Agency and a Director of the Union of Concerned Scientists. He chaired a committee of the National Academy of Sciences on valuing ecosystem services and was a Commissioner of the Pew Oceans Commission.

### **ROOM NUMBER FINDER**

Opening Ceremony, all Plenary Sessions, and Global Environmental Policy Panel will be held at the Main Hall on the 1st floor of Kyoto International Conferencee Hall.

Parallel 01 (July 4th, 11:30-13:00)		
Session ID	Session title	Room
1A	Forest Management	F
1B	Groundwater: Case Studies	К
1C	Willingness to Pay	C-2
1D	R&D and Technological Development I	G
1E	Noise Pollution	н
1F	Protected Areas and Parks	B-2
1G	Experiments in Environmental Economics I	B-1
1H	Renewable Energy I	I
11	Environmental Taxes: Theory	E
1J	Air Pollution I	J
1K	Contingent Valuation: Methodological Aspects I	C-1
1L	Delegation and Decentralisation	501
1M	Gender Issues	509
1N	Travel Cost Method	553
10	Ecosystem Services	510
1P	Theory of Environmental Policy I	554

Parallel 02 (July 4th, 14:30-16:15)		
Session ID	Session title	Room
2A	The Design of Climate Policy	B-1
2B	On-Site Survey Data and Issues	B-2
2C	Behavioral Responses to Environmental Information	C-1
20	Disclosure Programs	0-1
2D	Health Valuation in Asia	C-2
2E	Differential Games in Environmental Economics	D
2F	Discounting and Intergenerational Equity	E
2G	Environmental Kuznets Curves: Theory	F

2H	Water Management I	G
21	Illegal Activities	Н
2J	Hedonic Pricing I	I
2K	Finance and Environmental and Resource Economics	J
21	(Mizuho Financial Group Session)	J
2L	Biodiversity I	K
2M	Intertemporal Models of Natural Resources	501
2N	Tourism	509
20	Fisheries I	510
2P	Voluntary Pollution Abatement I	553
2Q	Spatial Issues and Geography	554

Parallel 03 (July 5th, 8:45-10:30)		
Session ID	Session title	Room
	Food Safety in Japan; Attitudes, Consumer Behaviors and	D 0
3A	Institutions	B-2
3B	Hybrid Economy Energy Models for Climate Policy Analysis	B-1
3C	Willingness to Pay for Endangered Species	C-1
3D	Fisheries II	C-2
3E	Exhaustible Resources	F
3F	Water: Irrigation I	G
3G	Morbidity and Disease	Н
3H	Forestry in Developing Countries I	I
31	Environmental Risks I	D
3J	The Firm and the Environment I	J
ЗK	Biodiversity Valuation	501
3L	Cost-Benefit Analysis I	E
3M	Environmental Kuznets Curve: Empirical Results I	509
3N	Agriculture I	510
30	Altruism and Environmental Ethics	554
3P	Political Economy	К

Parallel 4 (July	5th, 14:00-15:45)	
Session ID	Session title	Room

4A	International Society for Ecological Economics Session	C-1
4B	New Developments in the Travel Cost Method for	C-2
	Non-Market Valuation: Developments in Methodology.	
4C	Policies' Impacts on Costa Rican Deforestation	F
4D	Biodiversity II	G
4E	CGE Models I	н
4F	Climate Change I	B-2
4G	Contingent Valuation: Methodological Aspects II	I
4H	Experiments in Environmental Economics II	J
41	Non-Timber Forest Products I	509
4J	Urban Environmental Problems	501
4K	Sustainable Development I	B-1
4L	Strategic Trade and Environmental Policies	553
4M	Tradable Permits II	Е
411	Waste Management and Recycling I (Kyoto University COE	P
4N	Session)	D
40	Theoretical Aspects of Environmental Regulation	510
4P	Game Theory and the Environment I	554
4Q	Imperfect Competition	К

Parallel 5 (July 5th, 16:15-18:00)			
Session ID	Session title	Room	
5A	International Society for Ecological Economics Session II	B-2	
FD	New Developments in the Travel Cost Method for	C-2	
5B	Non-Market Valuation: New Empirical Findings		
5C	Economic History	D	
5D	Energy and Efficiency	F	
5E	Innovation I	G	
5F	Invasive Species	Н	
5G	Recreational Activities I	К	
5H	Sustainable Development II	Е	
51	Renewable Resources I	I	
5J	The Firm and the Environment II	J	
5K	Valuation: Stated Preferences	501	
5L	Forestry in Industrialised Countries	510	

5M	Environmental Kuznets Curve: Advanced Empirical	509
	Approaches	509
5N	River Management	553
50	Kyoto and Beyond	B-1
5P	Social Norms and Social Responsibility I	554
5Q	Economic Growth and the Environment I	C-1

Parallel 6 (July 6th 8:45-10:30)			
Session ID	Session title	Room	
6A	Biodiversity: BIOECON Network	C-1	
6B	China-Japan CDM: Potential, Evaluation and Finance to	D	
	Advance Sustainable Development	D	
6C	Spatial Variation in Benefits and Costs for Environmental	C-2	
00	Policy Making	0-2	
6D	Carbon Sequestration	F	
6E	Climate Change and Agriculture	G	
6F	Coastal Ecosystems	Н	
6G	Common-Property Resources I	I	
6H	Cost-Benefit Analysis II	B-1	
61	Experiments in Environmental Economics III	J	
6J	Tradable Permits I	Е	
6K	Voluntary Pollution Abatement II	510	
6L	Water Management II	501	
6M	Wildlife Conservation	K	
6N	Climate Change: Policies in Industrialised Countries	509	
60	Air Pollution II	553	
6P	Non-Point-Source Pollution	554	
6Q	International Environmental Agreements I	B-2	

Parallel 7 (July	6th, 14:00-15:45)	
Session ID	Session title	Room
7A	David Pearce Commemorative Session	B-1
7B	Environmental Quality and Health: Assessing Incentives,	C-1
	Costs and Benefits	0-1

7C	Policy Innovations in Environmental Management	C-2
7D	Bioeconomics I	F
7E	Biodiversity: Case Studies	G
7F	Choice Models in Environmental Economics	Н
7G	Climate Change and Innovation	B-2
7H	Common-Property Resources II	I
71	Contaminated Sites and Hazardous Waste	D
7J	Cost-Benefit Analysis III	E
7K	Eco-Labelling	J
7L	Economic Growth and the Environment II	510
7M	Experiments in Environmental Economics IV	501
7N	Theory of Environmental Policy II	К
70	Urban Transport	509
7P	Drinking Water	553
7Q	Green Protectionism	554

Parallel 8 (July 6th, 16:15-18:00)		
Session ID	Session title	Room
8A	Advances in Stated Preference Methodology	B-1
8B	Trade and the Environment I	C-2
8C	Valuation of Health	F
٦٥	Waste Management and Recycling II (Kyoto University	D
8D	COE Session)	D
8E	Water Quality Valuation	G
8F	Agriculture and the Environment: Theory	Н
8G	Bioeconomics II	I
8H	Climate Change, Forestry, and Agriculture	J
81	Coalition Formation and International Environmental	B-2
OI	Agreements	D-2
8J	Green National Accounting	501
8K	Road Transport	509
8L	Social Norms and Social Responsibility II	Е
8M	Food Safety	510
8N	Environmental Taxes: Empirical Analyses	C-1
80	Fisheries III	553

8P	Genetically Modified Food	554
8Q	Nuclear Power	К

Parallel 9 (July 7th, 8:45-10:30)			
Session ID	Session title	Room	
9A	The Environment Industry	B-2	
9B	Game-Theoretic Approaches to Climate-Policy Analysis	C-2	
	Assessing the Social Capacity for Environmental		
9C	Management: Towards Effective Environmental Cooperation	B-1	
	in Asia (Hiroshima University COE Session)		
9D	Agriculture II	F	
9E	Climate Change II	Е	
9F	Distributional Concerns	G	
9G	Non-Renewable Resources	Н	
9H	Non-Timber Forest Products II	I	
91	Trade and the Environment II	J	
9J	Valuation: Theoretical Contributions	501	
9K	Forestry in Developing Countries II	K	
9L	Environmental Risks II	509	
9M	Poverty	553	
9N	Interjurisdictional Competition	554	
90	Economic Growth and the Environment III	C-1	

Parallel 10 (July 7th, 14:00-15:45)			
Session title	Room		
Managing Natural Resources for Growth and Poverty	B-2		
Reduction in South Asia	D-2		
Valuation of Environmental Health Risks to Children	C-1		
International Environmental Agreements II	C-2		
Political Economy II	Е		
R&D and Technological Development II	F		
Recreational Activities II	К		
Renewable Energy II	G		
	Session titleManaging Natural Resources for Growth and PovertyReduction in South AsiaValuation of Environmental Health Risks to ChildrenInternational Environmental Agreements IIPolitical Economy IIR&D and Technological Development IIRecreational Activities II		

10H	Valueing Lives	н
101	Water: Irrigation II	I
10J	Game Theory and the Environment II	J
10K	Groundwater: Theoretical Approaches	501
10L	Innovation II	509
10M	Kyoto Emission Trading (Nomura Holdings Session)	B-1
10N	Theory of Environmental Policy III	510
10O	Environmental Regulation and the Firm	553
10P	Contingent Valuation: Methodological Aspects III	554

Parallel 11 (July 7th, 16:15-18:00)		
Session ID	Session title	Room
11A	Geography and the Environment	B-2
11B	Theory of Environmental Policy IV	C-1
11C	Waste Management and Recycling III	C-2
11D	Contingent Valuation: Methodological Aspects IV	F
11E	CGE Models II	G
11F	Soil Erosion and Conservation	Н
11G	Tradable Permits III	B-1
11H	Agriculture III	К
111	Economic Growth and the Environment IV	I
11J	Energy Markets	J
11K	Regional Environmental Problems in Asia	501
11L	Environmental Kuznets Curve: Empirical Results II	509
11M	Family and Children	510
11N	Climate Change Policies	E
110	Environmental Planning	553
11P	Ecosystem Management	554

Other Meetings		
July 3rd, 15:00-	EAERE Council Meeting	К
July 4th, 13:00-	ERE Editorial Board Meeting	К
July 5th, 12:30-	EAERE General Assembly	D
July 6th, 12:30-	AERE General Assembly	D
July 7th, 12:30-	EDE Editorial Board Meeting	K

#### PROGRAM WITH LIST OF PAPERS BY SESSIONS

#### MONDAY 3 JULY 2006

15:00 - 18:00	EAERE COUNCIL MEETING (BY INVITATION ONLY)	
15:00 - 18:00	<b>EAERE COUNCIL MEETING (BY INVITATION ONLY)</b> Chairperson: Anastasios Xepapadeas, University of Crete and President of EAERE	Room k
18:00 - 20:00	WELCOME RECEPTION	
18:00 - 20:00	WELCOME RECEPTION Chairperson:	Room Sakura
<b>TUESDAY 4 J</b> 08:30 - 09:15	ULY 2006 OPENING OF THE WORLD CONGRESS	Room Main Hal
09:30 - 11:00	PLENARY SESSION	
	PLENARY SESSION         PLENARY 1: ENVIRONMENTAL PROBLEMS AND COLLECTIVE ACTION         Chairperson: Richard T. Carson, University of California San Diego and President of AERE	Room Main Ha
09:30 - 11:00 09:30 - 11:00	PLENARY 1: ENVIRONMENTAL PROBLEMS AND COLLECTIVE ACTION Chairperson: Richard T. Carson, University of California	
	PLENARY 1: ENVIRONMENTAL PROBLEMS AND COLLECTIVE ACTION Chairperson: Richard T. Carson, University of California San Diego and President of AERE ENVIRONMENTAL PROBLEMS AND COLLECTIVE AC	
09:30 - 11:00	PLENARY 1: ENVIRONMENTAL PROBLEMS AND COLLECTIVE ACTION         Chairperson: Richard T. Carson, University of California San Diego and President of AERE         ENVIRONMENTAL PROBLEMS AND COLLECTIVE ACTIVE ACTION         Elinor Ostrom, Indiana University	

	EVOLUTIONARY STRATEGIES OF COMMUNITY MEMBERS UNDER JOINT FOREST MANAGEMENT REGIME Shashi Kant, University of Toronto Co-Author(s): Chander Shahi, University of Toronto THE IMPACT OF PUBLIC INTERVENTION ON SELF-INSURANCE AND INSURANCE ACTIVITIES IN RISKY FOREST MANAGEMENT Stéphane Couture, LEF-Nancy Co-Author(s): Marielle Brunette, MULTI-STAND FOREST MANAGEMENT UNDER A CLIMATIC RISK: DO TIME AND RISK PREFERENCES MATTER? Arnaud Reynaud, LERNA-INRA, University of Toulouse	1 7
11:30 - 13:00	<b>1B: GROUNDWATER: CASE STUDIES</b> Chairperson: Chandrakanth Mysore, University of Agricultural Sciences, Bangalore	Room K
	<ul> <li>GROUNDWATER OVER-DRAFT AND RETURNS TO MANAGEMENT IN HARD-ROCK REGIONS OF SOUTH INDIA</li> <li>Palanisami Kuppannan, Water Technology Centre</li> <li>Co-Author(s): Chieko Umetsu, Research Institute for Humanity and Nature</li> <li>EXPERIMENTALLY TESTING INSTITUTIONS AND POLICY INSTRUMENTS TO COORDINATE GROUNDWATER</li> <li>RECHARGE IN THE COLEAMBALLY IRRIGATION AREA</li> <li>John Ward, CSIRO</li> <li>Co-Author(s): John Tisdell, Griffith University and Stuart Whitten,</li> <li>GROUNDWATER CONTAMINATION DUE TO POLLUTION AND EFFECTS ON HUMAN AND ANIMAL HEALTH IN INDIA</li> <li>Chandrakanth Mysore, University of Agricultural Sciences Bangalore</li> <li>Co-Author(s): Varuni CN, University of Agricultural Sciences Bangalore, India, Chandrakanth Mysore, University of Agricultural Sciences Bangalore and SRIKANTHMURTHY PS, DEPTOF AGRICULTURAL ECONOMICS</li> </ul>	d ? ? , ,
11:30 - 13:00	1C: WILLINGNESS TO PAYFChairperson: Rex Labao, Economy and EnvironmentFProgram for Southeast Asia (EEPSEA); Resources,FEnvironment and Economics Center for Studies, Inc.(REECS)	Room C-2
	REDUCING GAINS/LOSS ASYMMETRY: A VIRTUAL REALITY CHOICE EXPERIMENT (VRCE) VALUING LAND USE CHANGE. Ian J. Bateman, University of East Anglia Co-Author(s): Brett Day, Centre for Social and Economic Research on the Global Environment, Andrew Jones, University of East Anglia and Simon Jude, University of East Anglia ASYMPTOTICALLY BOUNDED UTILITY FUNCTIONS AND THE DIFFERENCE BETWEEN WILLINGNESS TO PAY AND WILLINGNESS TO ACCEPT Sudip Chattophadyay, San Francisco State University Co-Author(s): Edward R. Morey,	n t

	<ul> <li>SCOPE, PHOTOGRAPHS, AND WILLINGNESS TO PAY OF CITIZENS FOR NATIONAL BIRD CONSERVATION: A CONTINGENT VALUATION APPLICATION IN DEVELOPING COUNTRY</li> <li>Rex Labao, Economy and Environment Program for Southeast Asia (EEPSEA); Resources, Environment and Economics Center for Studies, Inc. (REECS)</li> <li>Co-Author(s): Herminia Francisco, Economy and Environment Program for Southeast Asia (EEPSEA), Dieldre Harder, Resources, Economic and Environmental Centre for Studies, Inc (REECS) and Florence Ivy Santos, Resources, Environment, and Economics Center for Studies</li> </ul>
11:30 - 13:00	<b>1D: R&amp;D AND TECHNOLOGICAL DEVELOPMENT I</b> Room GChairperson: Etsuyo Michida, Institute of DevelopingEconomies, JETRO
	ECONOMIC IMPACTS OF BIOMASS BASED MATERIAL SUBSTITUTION AND RESOURCE CASCADING SYSTEMSAda Ignaciuk, Wageningen University Co-Author(s): Johan Sanders, WURENVIRONMENTALREGULATION REGULATION VITH VITH LEARNING, STRATEGIC INVESTMENT, AND LEARNING Nori Tarui, Columbia University Co-Author(s): Steve Polasky, University of MinnesotaARETHERE WIN-WINOPPORTUNITIES INDEVELOPING COUNTRIES?Etsuyo Michida, Institute of Developing Economies, JETRO
11:30 - 13:00	<b>1E: NOISE POLLUTION</b> Room HChairperson:SonjaKruitwagen, NetherlandsEnvironmental Assessment Agency (MNP)
	<ul> <li>VALUING AIRCRAFT NOISE: THRESHOLD, LEVEL AND INDEX EFFECTS</li> <li>Abigail Bristow, Loughborough University</li> <li>Co-Author(s): Mark Wardman, University of Leeds</li> <li>ESTIMATING THE DEMAND FOR PEACE AND QUIET USING PROPERTY MARKET DATA</li> <li>Brett Day, Centre for Social and Economic Research on the Global Environment</li> <li>Co-Author(s): Ian J. Bateman, University of East Anglia and Iain Lake, University of East Anglia</li> <li>NOISE ANNOYANCE IN THE NETHERLANDS: AN EMPRICAL VALUATION STUDY</li> <li>Sonja Kruitwagen, Netherlands Environmental Assessment Agency (MNP)</li> <li>Co-Author(s): Leon Janssen, Netherlands Environmental Assessment Agency (MNP) and Jeroen Udo, Tilburg University</li> </ul>
11:30 - 13:00	<b>1F: PROTECTED AREAS AND PARKS</b> Room B-2Chairperson: Isabel Mendes, ISEG- Instituto Superior de Economia e Gestão, Technical University of LisbonRoom B-2

	<ul> <li>PARKS, BUFFER ZONES, AND COSTLY ENFORCEMENT</li> <li>Elizabeth JZ Robinson, University of Oxford</li> <li>Co-Author(s): Heidi J. Albers, Oregon State University</li> <li>MODELING THE DEMAND FOR SICILIAN REGIONAL PARKS: A COMPOUND POISSON APPROACH</li> <li>Giovanni Signorello, UNIVERSITY OF CATANIA - ENVALAB</li> <li>Co-Author(s): Maria De Salvo, University of Catania, Jeffrey Englin, University of Nevada and Adam Longhorn, University of Nevada</li> <li>MEASURING THE AVERAGE PER-DAY NET BENEFIT OF NON-COUNSUMPTIVE WILDLIFE-ASSOCIATED RECREATION FOR A NATIONAL PARK: A COUNT DATA TRAVEL COST APPROACH</li> <li>Isabel Mendes, ISEG- Instituto Superior de Economia e Gestão, Technical University of Lisbon</li> <li>Co-Author(s): Isabel Proença, ISEG-Instituto Superior de Economia e Gestão, Technical University of Lisbon</li> </ul>
11:30 - 13:00	1G:EXPERIMENTSINENVIRONMENTALRoom B-1ECONOMICS IChairperson: Andreas Lange , University of Maryland
	<ul> <li>UNILATERAL EMISSIONS ABATEMENT: AN EXPERIMENT</li> <li>Bodo Sturm, Centre for European Economic Research (ZEW)</li> <li>Co-Author(s): Joachim Weimann, Otto von Guericke University</li> <li>Magdeburg, Faculty of Economics and Management</li> <li>WHEN GOOD INCENTIVES GO BAD: AN EXPERIMENTAL</li> <li>STUDY OF INSTITUTIONS, MOTIVATIONS AND CROWDING</li> <li>OUT</li> <li>Andrew Reeson, CSIRO</li> <li>Co-Author(s): John Tisdell, Griffith University</li> <li>THE OPTIMAL DESIGN OF CHARITABLE LOTTERIES:</li> <li>THEORY AND EXPERIMENTAL EVIDENCE</li> <li>Andreas Lange , University of Maryland</li> </ul>
11:30 - 13:00	<b>1H: RENEWABLE ENERGY I</b> Room IChairperson: Jörg Peters, Rheinisch-WestfaelischesInstitut für Wirtschaftsforschung (RWI)
	<ul> <li>THE INTERNALIZATION OF EXTERNALITIES IN THE PRODUCTION OF ELECTRICITY: WILLINGNESS TO PAY FOR THE ATTRIBUTES OF A POLICY FOR RENEWABLE ENERGY Alberto Longo, Queen's University Belfast and University of Bath Co-Author(s): Anil Markandya, FEEM and Marta Petrucci, University of Bath</li> <li>DOES MONEY TALK? THE EFFECT OF A MONETARY ATTRIBUTE ON THE MARGINAL RATE OF SUBSTITUTION IN A CHOICE EXPERIMENT</li> <li>Claudia Aravena, Universidad de Concepción - Concepción - Chile Co-Author(s): Peter Martinsson, department of economics, göteborg University and Riccardo Scarpa, University of Waikato, Economics Dpt</li> </ul>

	<b>BIODIESEL: A NEW OILDORADO?</b> Jörg Peters, Rheinisch-Westfaelisches Institut für Wirtschaftsforschung (RWI) Co-Author(s): Manuel Frondel, Rheinisch-Westfälisches Institut für Wirtschaftsforschung
11:30 - 13:00	<b>1I: ENVIRONMENTAL TAXES: THEORY</b> Room EChairperson: Angels Xabadia, University of Girona
	TAX DESIGN WITH ENDOGENOUS EARNING ABILITIES AND CONSUMPTION AND PRODUCTION EXTERNALITIES (WITH APPLICATIONS TO FRANCE) Norbert Ladoux, University of Toulouse (IDEI and GREMAQ)OPTIMAL AVIATION TICKET AND FUEL TAXES WITH ENVIRONMENTAL EXTERNALITIES AND FACTOR SUBSTITUTION Jon Strand, International Monetary FundINVESTMENT POLICY FOR NEW ENVIRONMENTAL MONITORING TECHNOLOGIES Angels Xabadia, University of Girona Co-Author(s): Katrin Millock, Centre d'Economie de la Sorbonne (CNRS-University of Paris I) and David Zilberman, University of California at Berkeley
11:30 - 13:00	<b>1J: AIR POLLUTION I</b> Room J Chairperson: Milan Scasny, Charles University Environmental Center
	<ul> <li>A GENERALIZED METHOD OF HEDONIC PRICES: MEASURING BENEFITS FROM REDUCED URBAN AIR POLLUTION M.N. MURTY AND S.C. GULATI Murty M N , Institute of Economic Growth Co-Author(s): Gulati S C, Institute of Economic Growth</li> <li>AN ECONOMETRIC ANALYSIS ON THE ENVIRONMENTAL PERFORMANCE OF INDUSTRIAL ENTERPRISES IN CHINA Dong Cao, Chinese academy for environmental planning Co-Author(s): Jinnan Wang, Chinese academy for environmental planning</li> <li>ECONOMIC ANALYSIS OF DRIVING FORCES OF AIR POLLUTION DURING THE TRANSITION PROCESS: EKC HYPOTHESIS TESTING IN THE CZECH REPUBLIC.</li> <li>Milan Scasny, Charles University Environmental Center Co-Author(s): Jan Bruha, Charles University Environment Center</li> </ul>
11:30 - 13:00	1K:CONTINGENTVALUATION:Room C-1METHODOLOGICAL ASPECTS IChairperson:XiaolinRen,University of Illinois atUrbana-Champaign
	TESTING FOR THE SURVEY MODE EFFECT ON CONTINGENT VALUATION DATA QUALITY: A CASE STUDY OF WEB BASED VERSUS IN-PERSON INTERVIEWS Cristina Marta, Departamento de Botânica, Faculdade de Ciências

Cristina Marta, Departamento de Botânica, Faculdade de Ciências

	<ul> <li>WHO COLLECTS RESOURCES WHEN THE ENVIRONMENT DEGRADES?</li> <li>Neetu Chopra, Delhi School of Economics</li> <li>Co-Author(s): Shreekant Gupta, Delhi School of Economics</li> <li>WHAT IS THE STATUS OF THE ENVIRONMENTAL GENDER GAP AMONG LIBERAL ARTS UNDERGRADUATE STUDENTS?</li> <li>Scott Steele, Berea College</li> <li>JOINT VERSUS SEPARATE DECISIONS WITH TASTE VARIATION: EXPLORING RESPONSES OF COUPLES IN CHOICE EXPERIMENTS FOR COASTAL WATER QUALITY VALUATION IN TOBAGO</li> <li>Riccardo Scarpa, University of Waikato, Economics Dpt Co-Author(s): Nesha Beharry, Environment Dpt, University of York</li> </ul>
11:30 - 13:00	<b>1M: GENDER ISSUES</b> Room 509Chairperson: Riccardo Scarpa, University of Waikato, Economics DptRoom 509
	<ul> <li>DECENTRALIZATION AND ENVIRONMENTAL QUALITY: AN INTERNATIONAL ANALYSIS OF WATER POLLUTION</li> <li>Hilary Sigman, Rutgers University</li> <li>DOES DECENTRALIZATION WORK? FOREST CONSERVATION IN THE HIMALAYAS</li> <li>E. Somanathan, Indian Statistical Institute, Delhi</li> <li>Co-Author(s): Bhupendra Singh Mehta, Foundation for Ecological Security and R. Prabhakar, Ashoka Trust for Research in Ecology and Environment</li> <li>HOW SHOULD STANDARDS BE SET AND MET?: AN INCOMPLETE CONTRACTING APPROACH TO DELEGATION IN REGULATION</li> <li>CY. Cynthia Lin, Department of Economics, Harvard University</li> </ul>
11:30 - 13:00	<b>1L: DELEGATION AND DECENTRALISATION</b> Room 501Chairperson: CY. Cynthia Lin, Department of Economics, Harvard University
	<ul> <li>e Tecnologia, Universidade de Coimbra, Portugal Co-Author(s): Tiago Domingos, Environment and Energy Section, DEM, Instituto Superior Técnico and Helena Freitas, Departamento de Botânica, Faculdade de Ciências e Tecnologia, Universidade de Coimbra, Portugal</li> <li>DOES CONSEQUENTIALITY ENSURE DEMAND REVELATION IN DOUBLE REFERENDA</li> <li>George. Hutchinson, Queen's University Belfast Co-Author(s): Katherine Carson, USAFA and Susan Chilton, University of Newcastle</li> <li>LANGUAGE-RELATED DIFFERENCES IN ENVIRONMENTAL BENEFITS ESTIMATION: EVIDENCE FROM A MAIL SURVEY</li> <li>Xiaolin Ren, University of Illinois at Urbana-Champaign Co-Author(s): John Braden, University of Illinois and Arianto Patunru, University of Indonesia</li> </ul>

11:30 - 13:00	<b>1N: TRAVEL COST METHOD</b> Room 553Chairperson:MarcellaVeronesi,Department ofAgricultural and ResourceEconomics,University ofMaryland and Department of Economics,University ofVerona,Italy
	THE INTERTEMPORAL SUBSTITUTION OF RECREATION DEMAND: A DYNAMIC KUHN-TUCKER MODEL WITH A CORNER SOLUTION Koichi Kuriyama, Waseda University Co-Author(s): Michael Hanemann, University of California, Berkeley
	ESTIMATING DISCRETE CHOICE MODELS WITH NOISY DATA: AN INVESTIGATION OF SEVERAL METHODOLOGIES Daniel Hellerstein, USDA/Economic Research Service Co-Author(s): Kevin Egan, University of Toledo INDIVIDUAL VERSUS HOUSEHOLD IN RECREATIONAL DEMAND MODELS
	Marcella Veronesi, Department of Agricultural and Resource Economics, University of Maryland and Department of Economics, University of Verona, Italy
11:30 - 13:00	10: ECOSYSTEM SERVICESRoom 510Chairperson: Henry Kinuthia, National EnvironmentalManagement Authority
	VALUING CHANGES IN THE QUALITY OF CORAL REEF ECOSYSTEMS IN THE CARIBBEAN: A STATED PREFERENCE STUDY OF RECREATIONAL SCUBA DIVING IN THE BONAIRE NATIONAL MARINE PARK George Parsons, University of Delaware Co-Author(s): Steven Thur, NOAA VALUES OF ECOSYSTEM SERVICES ON ARABLE LAND AND THE ROLE OF ORGANIC FARMING Yuki Takatsuka, Lincoln University Co-Author(s): Ross Cullen, Lincoln University, Matthew Wilson, University of Vermont and Steve Wratten, Lincoln University COMMUNITY LIVELIHOODS AND PERCEIVED ECONOMIC VALUE OF SHARED ECOSYSTEM RESOURCES: A CASE OF THE MAASAI PERCEPTION AND ECONOMIC VALUATION OF THE MUKOGODO FOREST IN LAIKIPIA DISTRICT, KENYA Henry Kinuthia, National Environmental Management Authority Co-Author(s): Francis Mwaura, University of Nairobi
11:30 - 13:00	<b>1P: THEORY OF ENVIRONMENTAL POLICY I</b> Room 554Chairperson: Amos Zemel, Ben Gurion University of the NegevRoom 554
	EMISSION CAPS VERSUS AMBIENT STANDARDS WHEN DAMAGE FROM POLLUTION IS STOCHASTIC Till Requate, University of Kiel EFFICIENT ENVIRONMENTAL TARGETS Tihomir Ancev, University of Sydney

#### **REGULATING ENVIRONMENTAL THREATS**

Amos Zemel, Ben Gurion University of the Negev Co-Author(s): Yacov Tsur, The Hebrew University

13:00 - 14:30	LUNCH	
13:00 - 14:30	ERE EDITORIAL BOARD MEETING (BY INVITATION ONLY)	
13:00 - 14:30	ERE EDITORIAL BOARD MEETING (BY INVITATION ONLY)RoomChairperson: Ian J. Bateman, University of East Anglia	 າ K
14:30 - 16:15	PARALLEL SESSIONS 02	
14:30 - 16:15	SYMPOSIUM SESSION: 2A: THE DESIGN OF       Room E         CLIMATE POLICY       Chairperson: Barbara Buchner, Fondazione Eni Enrico         Mattei       Organizer: Barbara Buchner, Fondazione Eni Enrico         Mattei       Mattei	 3-1
	<ul> <li>EVALUATING VOLUNTARY U.S. CLIMATE PROGRAMS: THE CASE OF CLIMATE WISE</li> <li>William Pizer, Resources for the Future</li> <li>Co-Author(s): Richard Morgenstern, Resources for the Future and Jhih-Shyang Shih, Resources for the Future</li> <li>EXPERIENCES FROM THE FIRST ALLOCATION ROUND IN THE EU EMISSIONS TRADING SCHEME</li> <li>Barbara Buchner, Fondazione Eni Enrico Mattei</li> <li>Co-Author(s): Carlo Carraro, University of Venice and A. Denny Ellerman, Center for Energy and Environmental Policy Research, Massachusetts Institute of Technology (MIT)</li> <li>EUROPEAN UNION ENVIRONMENTAL POLICY WITH PARTICULAR REFERENCE TO THE USE, POTENTIAL AND EFFECTIVENESS OF MARKET-BASED INSTRUMENTS</li> <li>Frank Convery,</li> </ul>	
14:30 - 16:15	SYMPOSIUM SESSION: 2B: ON-SITE SURVEY DATARoom EAND ISSUESChairperson: Daigee Shaw, Institute of Economics, Academia SinicaOrganizer: Daigee Shaw, Institute of Economics, Academia Sinica	3-2

#### ESTIMATION OF CHOICE PROBABILITIES AND QUANTITIES

	<ul> <li>DEMANDED FROM ENDOGENOUS SAMPLES</li> <li>Daigee Shaw, Institute of Economics, Academia Sinica</li> <li>INTERCEPT AND RECALL: EXAMINING AVIDITY CARRYOVER IN ON-SITE SAMPLE DATA</li> <li>Klaus Moeltner,</li> <li>LENGTH-BIASED SAMPLING: A REVIEW OF APPLICATIONS Termeh Shafie,</li> <li>ON-SITE SAMPLING BIAS IN CONTINGENT BEHAVIOR SURVEY DATA</li> <li>Ju-Chin Huang,</li> <li>EMPIRICAL PERFORMANCE OF ENDOGENOUSLY STRATIFIED AND TRUNCATED CONTINUOUS DISTRIBUTIONS: AN APPLICATION OF THE EXPONENTIAL DISTRIBUTION TO ROMANIA</li> <li>Jeffrey Englin, University of Nevada</li> </ul>
14:30 - 16:15	SYMPOSIUMSESSION:2C:BEHAVIORALRoom C-1RESPONSES TO ENVIRONMENTAL INFORMATIONDISCLOSURE PROGRAMSChairperson: Lori Bennear, Duke UniversityOrganizer: Lori Bennear, Duke University
	<ul> <li>DOES PUBLIC DISCLOSURE REDUCE DRINKING WATER VIOLATIONS?: EVIDENCE FROM MASSACHUSETTS Lori Bennear, Duke University</li> <li>CAN INFORMATION ALONE CHANGE BEHAVIOR? ARSENIC CONTAMINATION OF GROUNDWATER IN BANGLADESH Alexander Pfaff, Economics Department, Columbia University Co-Author(s): Malgosia Madajewicz, Columbia University</li> <li>INCENTIVES TO SELF REPORT: REGULATORY TREATMENT OF "VOLUNTARY" DISCLOSURES Alexander Pfaff, Economics Department, Columbia University Co-Author(s): Krishna Rao, Columbia University</li> <li>INFORMATION DISCLOSURE: PLANT LEVEL RESPONSES TO TRI RANKINGS Aaron Swoboda, University of Pittsburgh Co-Author(s): Shanti Gamper-Rabindran ,</li> </ul>
14:30 - 16:15	SYMPOSIUM SESSION: 2D: HEALTH VALUATION INRoom C-2ASIAChairperson: Kenshi Itaoka, Mizuho Information & Research InstituteOrganizer: Kenshi Itaoka, Mizuho Information & Research Institute
	MORBIDITY VALUATION WITH CESSATION LAG: CHOICE EXPERIMENTS FOR PUBLIC AND PRIVATE GOODS IN JAPAN Kenshi Itaoka, Mizuho Information & Research Institute Co-Author(s): Makoto Akai, National Institute of Advanced Industrial Science and Technology (AIST), Alan Krupnick, Resources for the Future and Aya Saito, Mizuho Information & Research Institute, Inc.

## CONTINGENT VALUATION AND THE ECONOMIC VALUE OF AIR-POLLUTION-RELATED HEALTH RISKS IN CHINA

Xiaoqi Guo, Ohio State University

Co-Author(s): Timothy Haab, Department of Agricultural, Environmental and Development Economics, The Ohio State University and James K. Hammitt, Harvard University

### SOCIETAL PERSPECTIVES ON VALUING RISK REDUCTIONS FOR CHILDREN

Kenji Takeuchi, Kobe University

Co-Author(s): Atsuo Kishimoto, and Takahiro Tsuge, Takasaki City University of Economics

## MORTALITY RISK VALUATION IN SIX COUNTRIES: TESTING BENEFIT TRANSFER APPROACHES

Alan Krupnick, Resources for the Future

Co-Author(s): Anna Alberini, AREC, University of Maryland and FEEM, Venice, Soma Bhattacharya, University of Maryland and Marcella Veronesi, Department of Agricultural and Resource Economics, University of Maryland and Department of Economics, University of Verona, Italy

## THE VALUE OF MORTALITY RISK REDUCTIONS IN DELHI, INDIA

Maureen Cropper, World Bank

Co-Author(s): Anna Alberini, AREC, University of Maryland and FEEM, Venice and Soma Bhattacharya, University of Maryland

#### 14:30 - 16:15 2E: DIFFERENTIAL GAMES IN ENVIRONMENTAL Room D ECONOMICS

Chairperson: Santiago Rubio, university of valencia

#### A DIFFERENTIAL GAME THEORETIC ANALYSIS OF INTERNATIONAL TRADE IN RENEWABLE RESOURCES Amit Batabyal, Rochester Institute of Technology

Co-Author(s): Hamid Beladi, University of Texas at San Antonio

TAX SCHEMES IN A CLASS OF DIFFERENTIAL GAMES Ken-Ichi Akao, Waseda University

#### FEEDBACK NASH EQUILIBRIA FOR NON-LINEAR DIFFERENTIAL GAMES IN POLLUTION CONTROL Aart de Zeeuw, University of Tilburg

Co-Author(s): George Kossioris, University of Crete, Karl-Göran Mäler, The Beijer Institute, Michael Plexousakis, University of Crete and Anastasios Xepapadeas, University of Crete and President of EAERE

#### ON CAPTURING RENT FROM A NON-RENEWABLE RESOURCE INTERNATIONAL MONOPOLY: A DYNAMIC GAME APPROACH

Santiago Rubio, university of valencia

# 14:30 - 16:15 2F: DISCOUNTING AND INTERGENERATIONAL Room E EQUITY Chairperson: Thomas Sterner, University of Göteborg

RECONSIDERATION OF DYNAMIC UTILITY OPTIMISATION AND INTERGENERATIONAL EQUITY IN SUSTAINABLE

	<ul> <li>DEVELOPMENT STUDIES</li> <li>Satoshi Kojima, Institute for Global Environmental Strategies</li> <li>PARADOXICAL CONSUMPTION BEHAVIOR WHEN ECONOMIC ACTIVITY HAS ENVIRONMENTAL EFFECTS</li> <li>Geir B. Asheim, University of Oslo</li> <li>DECLINING DISCOUNT RATES: A CROSS-COUNTRY COMPARISON</li> <li>Phoebe Koundouri, Athens University of Economics and Business</li> <li>DISCOUNTING AND RELATIVE PRICES IN ASSESSING FUTURE ENVIRONMENTAL DAMAGES</li> <li>Thomas Sterner, University of Göteborg</li> <li>Co-Author(s): Michael Hoel, University of Oslo</li> </ul>
14:30 - 16:15	2G:ENVIRONMENTALKUZNETSCURVES:Room FTHEORYChairperson:LuisitoBertinelli,universitedeluxembourg
	<ul> <li>CAPITAL ACCUMULATION, INTEREST RATE, AND THE INCOME-POLLUTION PATTERN. A SIMPLE MODEL</li> <li>Di Vita Giuseppe, University of Catania</li> <li>ECONOMIC GROWTH AND THE DIFFUSION OF CLEAN TECHNOLOGIES: EXPLAINING ENVIRONMENTAL KUZNETS CURVES</li> <li>Hannes Egli, ETH Zurich</li> <li>Co-Author(s): Lucas Bretschger, ETH Zürich and Sjak Smulders, University of Tilburg</li> <li>RICH AND POOR JOINING HANDS AGAINST THE MIDDLE CLASS ENVIRONMENTAL ELITE?</li> <li>Clas Eriksson, SLU</li> <li>SUSTAINABLE ECONOMIC DEVELOPMENT AND THE ENVIRONMENT: THEORY AND EVIDENCE</li> <li>Luisito Bertinelli, universite de luxembourg</li> <li>Co-Author(s): Eric Strobl, Ecole Polytechnique and Benteng Zou,</li> </ul>
14:30 - 16:15	<b>2H: WATER MANAGEMENT I</b> Room G         Chairperson:       CHISATO       ASAHI,       Policy       Research         Institute for Land, Infrastructure and Transport, JAPAN.       Ministry
	<ul> <li>ALLOCATING RESOURCES IN AN UNCERTAIN WORLD: WATER MANAGEMENT AND ENDANGERED SPECIES RISK</li> <li>Richard Woodward, Dept. of Ag. Economics, Texas A&amp;M Univ.</li> <li>Co-Author(s): Richard Woodward, Dept. of Ag. Economics, Texas A&amp;M Univ.</li> <li>GOING BEYOND WILLINGNESS TO PAY: SOCIO-POLITICAL DETERMINANTS OF THE FEASIBILITY OF A WATER TARIFF REFORM IN MEXICO CITY</li> <li>Gloria Soto Montes de Oca, Universidad Iberoamericana and CSERGE, University of East Anglia</li> <li>Co-Author(s): Ian J. Bateman, University of East Anglia</li> <li>ALTERNATIVE INSTITUTIONS FOR WATER DISTRIBUTION</li> </ul>

	<ul> <li>Ujjayant Chakravorty, University of Central Florida and Chieko Umetsu, Research Institute for Humanity and Nature</li> <li>EFFICIENCY OF EX POST RISK MANAGEMENT SYSTEM STUDY OF MUNICIPAL WATER POLLUTION</li> <li>CHISATO ASAHI, Policy Research Institute for Land, Infrastructure and Transport, Ministry of Land, Infrastructure and Transport JAPAN.</li> <li>Co-Author(s): Kiyoko Hagihara, Faculty of Urban Environmenta Sciences, Tokyo Metropolitan University, JAPAN.</li> </ul>	;
14:30 - 16:15	<b>2I: ILLEGAL ACTIVITIES</b> Chairperson: Lorenzo Pellegrini, Institute for Social Studies	Room H
	<ul> <li>OPTIMAL WASTE POLICIES WHEN ILLEGAL DISPOSAL CAN BE CONCEALED</li> <li>Hideo Koide, Seinan Gakuin University</li> <li>AN EMPIRICAL STUDY OF ILLEGAL DUMPING OF HOME ELECTRIC APPLIANCES</li> <li>Shigeru Matsumoto, Kansai University</li> <li>Co-Author(s): Kenji Takeuchi, Kobe University</li> <li>OPTIMAL CLEANUP POLICY FOR ILLEGALLY DUMPEE SCRAP TIRE STOCKPILE UNDER RISK OF FIRE</li> <li>Naoya Abe, National Institute for Environmental Studies (JAPAN) Cornell University (US)</li> <li>THE RULE OF THE JUNGLE IN PAKISTAN: A CASE STUDY ON CORRUPTION AND FOREST MANAGEMENT IN SWAT</li> <li>Lorenzo Pellegrini, Institute for Social Studies</li> </ul>	E D /
14:30 - 16:15	<b>2J: HEDONIC PRICING</b> Chairperson: Arianto Patunru, University of Indonesia	Room I
	<ul> <li>HEDONIC PRICE FUNCTIONS FOR ZURICH AND LUGANG WITH SPECIAL FOCUS ON ELECTROSMOG</li> <li>Massimo Filippini, Swiss federal Institute of Technology (ETHZ and USI</li> <li>Co-Author(s): Silvia Banfi, and Andrea Horehajova,</li> <li>DOES HOUSING MARKET IN JAPAN RESPOND TO THE DISCLOSURE OF THE INFORMATION ON THE RELEASE AND TRANSFER OF CHEMICAL SUBSTANCES FROM THE FACILITY?</li> <li>Akira Hibiki, National Institute for Environmental Studies</li> <li>Co-Author(s): Shunsuke Managi, Yokohama National University</li> <li>QUALITY OF LIFE AND ENVIRONMENTAL AMENITIES: A SUBJECTIVE WELL-BEING APPROACH</li> <li>Finbarr Brereton, UCD School of Geography, Planning and Environmental Policy,</li> <li>Co-Author(s): J. Peter Clinch, UCD School of Geography, Planning and Environmental Policy and Susana Ferreira, University College Dublin</li> <li>WHO CARES ABOUT ENVIRONMENTAL STIGMAS AND DOES IT MATTER?</li> </ul>	) E E A A

	Arianto Patunru, University of Indonesia Co-Author(s): John Braden, University of Illinois and Sudip Chattophadyay, San Francisco State University
14:30 - 16:15	2K: FINANCE AND ENVIRONMENTAL AND Room RESOURCE ECONOMICS (MIZUHO FINANCIAL GROUP SESSION) Chairperson: Mario Fernandez, Escuela Superior Politecnica del Litoral
	<ul> <li>DOES CORPORATE SUSTAINABILITY MATTER TO INVESTORS?</li> <li>Shih-Fang Lo, Chung-Hua Institution for Economic Research Co-Author(s): Her-Jiun Sheu, Department of Management Science, National Chiao-Tung University</li> <li>THE FUTURE ROLE OF PHOTOVOLTAICS. A LEARNING CURVE VERSUS PORTFOLIO PERSPECTIVE. Johan Albrecht, Ghent University</li> <li>WHAT DETERMINES THE INCLUSION IN A SUSTAINABILITY STOCK INDEX? A PANEL DATA ANALYSIS FOR EUROPEAN COMPANIES</li> <li>Andreas Ziegler, Centre for European Economic Research (ZEW)</li> <li>Co-Author(s): Michael Schröder, Centre for European Economic Research (ZEW)</li> <li>MEDIAN-UNBIASED ESTIMATION OF THE PERSISTENCE OF SHOCKS TO THE PRICE SERIES OF SIX COMMODITIES</li> <li>Mario Fernandez, Escuela Superior Politecnica del Litoral</li> </ul>
14:30 - 16:15	<b>2L: BIODIVERSITY I</b> Room H         Chairperson: Laura Gariup, Munich Graduate School of       Room H         Economics       Room H
	<ul> <li>OPTIMAL CONTRACT LENGTH FOR VOLUNTARY LAND CONSERVATION PROGRAMS</li> <li>Amy Ando, University of Illinois at Urbana-Champaign Co-Author(s): Xiaoxuan Chen, University of Illinois at Urbana-Champaign</li> <li>MANAGING LAND USE AND LAND COVER CHANGE IN THE BIODIVERSITY CONTEXT WITH REGARD TO EFFICIENCY, EQUALITY AND ECOLOGICAL ACCURACY</li> <li>Cornelia Ohl, UFZ Centre for Environmental Research Leipzig-Halle</li> <li>Co-Author(s): Martin Drechsler, , Karin Johst, and Frank Wätzold,</li> <li>COST-EFFICIENT RESERVE SITE SELECTION FAVORING PERSISTENCE OF THREATENED AND ENDANGERED SPECIES</li> <li>Bertrand Hamaide, Facultes Universitaires Saint-Louis</li> <li>Co-Author(s): Charles S. ReVelle, Johns Hopkins University and Justin C. Williams, Johns Hopkins University</li> <li>BIODIVERSITY LOSS AND STOCHASTIC TECHNOLOGICAL PROCESSES: A SUSTAINABLE GROWTH ANALYSIS</li> <li>Laura Gariup, Munich Graduate School of Economics</li> </ul>

14:30 - 16:15	2M: INTERTEMPORAL MODELS OF NATURALRoom 501RESOURCESChairperson: Birgit Friedl, Department of Economics, University of Graz
	PRICINGRESOURCEEXTRACTIONWITHSTOCKEXTERNALITIESSittidaj Pongkijvorasin, University of HawaiiCo-Author(s):BasharatPitafi,University of Southern Illinois, Carbondale and James Roumasset, University of Hawaii, at ManoaNATURALRESOURCEUSECONFLICT:GOLDMININGINTROPICALRAINFORESTINGöteborgUniversity, Sweden.
	POLLUTING RESOURCES, ECONOMICALLY RELEVANT STOCK AND ENVIRONMENTAL POLICY Etienne Billette de Villemeur, University of Toulouse (IDEI & GREMAQ) Co-Author(s): André Grimaud, University of Toulouse (IDEI & LERNA)
	RESOURCE TECHNOLOGY SHOCKS AND THE TRANSITIONAL DYNAMICS IN AN OLG MODEL WITH HARVEST COSTS Birgit Friedl, Department of Economics, University of Graz Co-Author(s): Karl Farmer, Department of Economics, University of Graz
14:30 - 16:15	2N: TOURISMRoom 509Chairperson: Yasushi Shoji, Hokkaido University
	<ul> <li>BENCHMARKING IN TOURISM DESTINATION, KEEPING IN MIND THE SUSTAINABLE PARADIGM</li> <li>Alessandro Lanza, FEEM</li> <li>Co-Author(s): Valentina Bosetti, FEEM</li> <li>TOURISM SPECIALIZATION AND ENVIRONMENTAL SUSTAINABILITY IN A DYNAMIC ECONOMY</li> <li>Fabio Cerina, University of Cagliari and CRENoS</li> <li>DEMAND DRIVEN SUSTAINABLE TOURISM? A CHOICE MODELLING APPROACH</li> <li>Rinaldo Brau, University of Cagliari</li> <li>DETERMINING VISITOR PREFERENCES FOR MAINTENANCE AND REPAIR OF ALPINE TRAILS BY APPLYING PHOTOGRAPHIC TECHNIQUES AND CHOICE EXPERIMENT</li> <li>Yasushi Shoji, Hokkaido University</li> <li>Co-Author(s): Tomoya Hashizume, Hokkaido University, Koichi Kuriyama, Waseda University and Takahiro Tsuge, Takasaki City University of Economics</li> </ul>
14:30 - 16:15	20: FISHERIES I Room 510 Chairperson: John Lynham, University of California Santa Barbara
	BALANCING EFFICIENCY AND RISK WITH FLEXIBLE CATCH

#### BALANCING EFFICIENCY AND RISK WITH FLEXIBLE CATCH

	<ul> <li>BALANCING POLICIES FOR MULTISPECIES INDIVIDUAL FISHERY QUOTAS</li> <li>Daniel S. Holland, Gulf of Maine Research Institute Co-Author(s): Guillermo Herrera, Bowdoin College</li> <li>PLAYING CHICKEN WITH SALMON</li> <li>Jon Olaf Olaussen, Department of Economics, NTNU</li> <li>THE IMPACT OF COLLECTIVE FISHING PERMITS ON FLEET ACTIVITY AND LANDINGS IN THE ARTISANAL HAKE FISHERY IN CHILE</li> <li>Carlos Chavez, Department of Economics, Concepcion University, Chile.</li> <li>Co-Author(s): Jorge Dresdner, Universidad de Concepcion</li> <li>SCHOOLS OF FISHERMEN: A THEORY OF INFORMATION SHARING IN SPATIAL SEARCH</li> <li>John Lynham, University of California Santa Barbara</li> </ul>
14:30 - 16:15	<b>2P: VOLUNTARY POLLUTION ABATEMENT I</b> Room 553Chairperson: Bowman Cutter, UC RiversideRoom 553
	<ul> <li>ENFORCEMENT AND OVER-COMPLIANCE Jay Shimshack, Tufts University Co-Author(s): Michael B. Ward, Resources Policy Center DO ENVIRONMENTAL AUDITS IMPROVE COMPLIANCE? Madhu Khanna, University of Illinois at Urbana-Champaign Co-Author(s): Diah widyawati, University of Illinois</li> <li>EVALUATING FIRMS¡Ç DECISIONS OF VOLUNTARY POLLUTION ABATEMENT: EMPIRICAL FINDINGS FROM THE PROPER PROGRAM IN INDONESIA Nurul Jannah, Graduate School for International Development and Cooperation, Hiroshima University. Co-Author(s): Shunji Matsuoka, Hiroshima University and Katsuya Tanaka, Hiroshima University</li> <li>VOLUNTARY PROGRAMS AND ENVIRONMENTAL REGULATION: EVIDENCE FROM 'SPARE THE AIR' Bowman Cutter, UC Riverside Co-Author(s): Matthew Neidell, Columbia University</li> </ul>
14:30 - 16:15	<b>2Q: SPATIAL ISSUES AND GEOGRAPHY</b> Room 554Chairperson: Caviglia-Harris Jill, Salisbury University
	<ul> <li>MODELING SPATIAL SUSTAINABILITY: SPATIAL WELFARE ECONOMICS VERSUS ECOLOGICAL FOOTPRINT</li> <li>Fabio Grazi, Dept. of Spatial Economics, Free University of Amsterdam</li> <li>Co-Author(s): Piet Rietveld, and Jeroen van den Bergh, Free University Amsterdam</li> <li>VALUING SPATIALLY INTEGRATED AMENITIES AND RISKS IN COASTAL HOUSING MARKETS</li> <li>Okmyung Bin, East Carolina University</li> <li>Co-Author(s): Tom Crawford, , Jamie Kruse, and Craig Landry,</li> <li>WATER POLICY INSTRUMENTS IN THE PRESENCE OF SPATIAL HETEROGENEITY: AN APPLICATION TO THE</li> </ul>

#### EUTROPHICATED STOCKHOLM ARCHIPELAGO

Henrik Scharin, Swedish Environmental Protection Agency Co-Author(s): Ing-Marie Gren, Department of Economics, SLU, Uppsala

### IMPROVING LAND USE MODELING USING GIS DATA AND SPATIAL ANALYSIS

Caviglia-Harris Jill, Salisbury University Co-Author(s): Harris Daniel, Salisbury University

#### 16:30 - 18:30 GLOBAL ENVIRONMENTAL POLICY PANEL

16:30 - 18:30 INTERNATIONAL FRAMEWORK FOR POST KYOTO Room Main Hall PROTOCOL Chairperson: Kazuhiro Ueta , Kyoto University and President of SEEPS

#### **PRESENTATION 1**

Rajendra K. Pachauri, IPCC **PRESENTATION 2** Nobel Laureate Professor Joseph E. Stiglitz, Columbia University **PRESENTATION 3** Kejun Jiang, Energy Research Institute, National Development and Reform Commission, Beijing, China

#### PRESENTATION 4

Carlo Carraro, University of Venice

#### **PRESENTATION 5**

Takamitsu Sawa, Ritsumeikan University

#### WEDNESDAY 5 JULY 2006

08:45 - 10:30	PARALLEL SESSIONS 03
08:45 - 10:30	SYMPOSIUM SESSION: 3A: FOOD SAFETY IN Room B- JAPAN; ATTITUDES, CONSUMER BEHAVIORS AND
	INSTITUTIONS Chairperson: Ryohei KADA, AMITA Institute for Sustainable Economies
	Organizer: Ryohei KADA, AMITA Institute for Sustainable Economies
	BSE-RELATED RISK PERCEPTIONS AND ATTITUDES OF JAPANESE CONSUMERS: AN OPINION SURVEY OF THE TOKYO-METROPOLITAN AREA Atsushi Maruyama, Chiba University Co-Author(s): Shinichi Kurihara, Chiba University, A.E. Luloff, Pennsylvania State University, Tomoyoshi Matsuda, Chiba University, Mima Nishiyama, Chiba University and Shimoura
	Shinpei, Chiba University ECONOMIC ANALYSIS OF COSTS AND ECONOMIC LOSSES
	IN THE BUILDING PROCESS OF THE BSE RISK MANAGEMENT SYSTEM Yoshihito Senda, AMITA Institute for Sustainable Economies Co-Author(s): Masahiko Ariji, AMITA Institute for Sustainable Economies
	DETERMINANTS OF WILLINGNESS TO PAY FOR NON-GENETICALLY MODIFIED FOODS: THE MEDIATING ROLE OF RISK PERCEPTION Taku Terawaki, Ritsumeikan University
	Co-Author(s): Wen S. Chern, The Ohio State University and Naoya Kaneko, The Ohio State University
	THE INFLUENCE OF THE JAPANESE CONSUMERS' ATTITUDES TOWARDS FOOD SAFETY ON THE EVALUATIONS OF BEEF : A CHOICE EXPERIMENT ANALYSIS Hideo Aizaki, National Institute for Rural Engineering Co-Author(s): Toshiko Kikkawa, Keio University, Kazuo Sato, Rakuno Gakuen University and Manabu Sawada, Obihiro
	University of Agriculture and Veterinary Medicine EVOLUTIONAL GAME THEORETIC APPROACH TO FOOD
	<b>CONSUMPTION IN JAPAN</b> Kodama Yoshifumi, Utsunomiya University Co-Author(s): Jinjiro CHINO, Utsunomiya University, Koji KATO, Utsunomiya University and Yoshifumi KODAMA, Utsunomiya
	University DIFFICULTY IN RESTORING PUBLIC CONFIDENCE IN RISK
	<b>COMMUNICATIONJAPAN'S EXPERIENCES OF BSE</b> Yoshino Akira, Kyoto University Co-Author(s): Takashi Takebe, and Hironobu Takeshita, Nihon University

08:45 - 10:30	SYMPOSIUM SESSION: 3B: HYBRID ECONOMY ENERGY MODELS FOR CLIMATE POLICY ANALYSISRoom B-1Chairperson: Carlo Carraro, University of Venice Organizer: Carlo Carraro, University of VeniceRoom B-1				
	<ul> <li>MITIGATION STRATEGIES AND COSTS OF CLIMATE PROTECTION: THE EFFECTS OF ETC IN THE HYBRID MODEL MIND</li> <li>Ottmar Edenhofer, Potsdam Institute for Climate Impact Research (PIK)</li> <li>WITCH: WORLD INDUCED TECHNICAL CHANGE HYBRID MODEL</li> <li>Valentina Bosetti, FEEM</li> <li>Co-Author(s): Carlo Carraro, University of Venice, Marzio Galeotti, University of Milan, emanuele massetti, FEEM and Massimo Tavoni, FEEM</li> <li>MACROECONOMIC CONSISTENCY ISSUES IN E3 MODELING: THE CONTINUED FABLE OF THE ELEPHANT AND THE RABBIT</li> <li>Frédéric Ghersi, PREGX - CNRS</li> <li>Co-Author(s): Jean-Charles Hourcade, CIRED/CNRS</li> </ul>				
08:45 - 10:30	SYMPOSIUM SESSION: 3C: WILLINGNESS TO PAY       Room C-1         FOR ENDANGERED SPECIES       Chairperson: David Glover,         Organizer: David Glover,       Organizer,				
	<ul> <li>ATTITUDES ON ENVIRONMENT AND CONSERVATION OF ENDANGERED MARINE TURTLES: AN ASIAN CROSS-COUNTRY STUDY</li> <li>Orapan nabangchang-Srisawalak, Suhkhothai Thammatirat Open University</li> <li>HYPOTHETICAL AND REAL WILLINGNESS TO PAY FOR MARINE TURTLE CONSERVATION: A CROSS COUNTRY EXPERIMENT</li> <li>Dieldre Harder, Resources, Economic and Environmental Centre for Studies, Inc (REECS)</li> <li>Co-Author(s): Anabeth Indab, , Jianjun Jin, PhD student, University of Macau, Orapan nabangchang-Srisawalak, Suhkhothai Thammatirat Open University, Rodelio Subade, and Thuy Truong, University of Economics HCMC, Vietnam</li> <li>WILLINGNESS TO PAY FOR MARINE TURTLE CONSERVATION: A CROSS COUNTRY COMPARISON IN ASIA Anabeth Indab, Resources, Economics and Environmental Centre for Studies</li> <li>Co-Author(s): Dieldre Harder, Resources, Economic and Environmental Centre for Studies, Inc (REECS), Jianjun Jin, PhD student, University of Macau, Orapan nabangchang-Srisawalak, Suhkhothai Thammatirat Open University, Rodelio Subade, and Invironmental Centre for Studies, Inc (REECS), Jianjun Jin, PhD student, University of Macau, Orapan nabangchang-Srisawalak, Suhkhothai Thammatirat Open University, Rodelio Subade, and Thuy Truong, University of Economics HCMC, Vietnam</li> </ul>				

	Chairperson: Preeti Kapuria, Institute of Economic Growth, Delhi	
	FISHERYCO-MANAGEMENTANDPOOLINGARRANGEMENTSHirotsugu Uchida, University of California, DavisCo-Author(s): James Wilen, University of California, DavisEXPERTSYSTEMSANDTHEIRCONTRIBUTIONINTHESUSTAINABLEMANAGEMENT OF RENEWABLE RESOURCESINDEVELOPINGCOUNTRIES.THECASEOFALGERIANFISHERIES.SaidChaoukiCHAKOUR,University ofBejaia,andCREAEAlgiers,Algeria.MEASURINGSPECIESDIVERSITYANDITSIMPACTONFUTURECATCH-THECASEOFMARINEFISHERY INKERALAPreetiKapuria, Institute of Economic Growth, DelhiENTRYDETERRENCEORCONSERVATIONMODELASAPOLICYCONTEST:THEEFFECTOFCHANGEONUrsSteiner-Brandt, University of Southern Denmark	
08:45 - 10:30	<b>3E: EXHAUSTIBLE RESOURCES</b> Chairperson: Jean-Pierre Amigues, LERNA - Université de Toulouse 1 and INRA	Room F
	<ul> <li>EXHAUSTIBLE RESOURCE DEPLETION IN A TWO REGION COMPETITIVE ECONOMY</li> <li>Ramesh C Kumar, University of Waterloo</li> <li>ON THE EFFECTS OF STOCHASTIC TECHNICAL CHANGE ON OPTIMAL SUSTAINABLE GROWTH PATHS WITH EXHAUSTIBLE RESOURCE</li> <li>Gilles Lafforgue, University of Toulouse (INRA-LERNA)</li> <li>CONSTANT SAVINGS RATES AND QUASI-ARITHMETIC POPULATION GROWTH UNDER EXHAUSTIBLE RESOURCE CONSTRAINTS</li> <li>Cees Withagen, Department of Economics, University of Tilburg and CENTER, Tilburg</li> <li>Co-Author(s): Geir B. Asheim, University of Oslo, Wolfgang Buchholz, University of Regensburg, John Hartwick, Queen's University and Tapan Mitra,</li> <li>OPTIMAL ENDOGENOUS SUSTAINABILITY WITH AN EXHAUSTIBLE RESOURCE</li> <li>Jean-Pierre Amigues, LERNA - Université de Toulouse 1 and INRA Co-Author(s): Michel MOREAUX, Toulouse I University</li> </ul>	
08:45 - 10:30	<b>3F: WATER: IRRIGATION I</b> Chairperson: Lisa Lee, University of Sydney	Room G
	SAND MINING EXTERNALITY AND GROUNDWATER DEPLETION IN INDIA Chandrakanth Mysore, University of Agricultural Sciences Bangalore Co-Author(s): Hemalatha AC, University of Agricultural Sciences	3

	<ul> <li>Bangalore and nagaraj nareppa, Dept of Agri Economics</li> <li>WATER ASSIGNMENT BY A SOCIAL RULE: THE CASE OF SEQUENTIAL RULES</li> <li>RENAN-ULRICH GOETZ, DEPARTMENT OF ECONOMICS UNIVERSITY OF GIRONA (SPAIN)</li> <li>Co-Author(s): Yolanda Martinez, DEPARTMENT OF ECONOMIC ANALYSIS. UNIVERSITY OF ZARAGOZA (SPAIN) and JOFRE RODRIGO, UNIVERITY OF GIRONA (SPAIN)</li> <li>DESIGNING WATER MARKETS TO MANAGE COUPLED EXTERNALITIES : A PRELIMINARY ANALYSIS</li> <li>Robert Lifran, INRA LAMETA</li> <li>Co-Author(s): Sophie Legras, University of Montpellier 1 and Australian National University</li> <li>WEIGHING UP THE COST: ECONOMIC IMPACT OF WATEF SCARCITY AND ENVIRONMENTAL TARGETS</li> <li>Lisa Lee, University of Sydney</li> <li>Co-Author(s): Tihomir Ancev, University of Sydney</li> </ul>	5. ⊂ Ξ D
08:45 - 10:30	<b>3G: MORBIDITY AND DISEASE</b> Chairperson: Jon Strand, International Monetary Fund	Room H
	THE IMPACT OF THE BIRD FLU ON PUBLIC WILLINGNESS TO PAY FOR THE PROTECTION OF MIGRATORY BIRDS Roy Brouwer, Institute for Environmental Studies Co-Author(s): Elena Sultania, Institute for Environmental Studies and Pieter van Beukering, Institute for Environmental Studies COMPARISON OF COST-OF-ILLNESS WITH WILLINGNESS-TO-PAY ESTIMATES TO AVOID SHIGELLOSIS EVIDENCE FROM CHINA Soyeon Guh, University of North Carolina-Chapel Hill Co-Author(s): John Clemens, International Vaccine Institute Andrew Nyamete, International Vaccine Institute, Christine Poulos Research Triangle Institute, Lorenz von Seidlein, Internationa Vaccine Institute, Dale Whittington, University of North Carolina Chapel Hill and Chen Xingbao, Fudan Medical University ZERO VALUES TREATMENT IN CV STUDY OF MORBIDITY EVIDENCE FROM CZECH STUDY Jan Urban, Charles University Environment Center Co-Author(s): Marketa Braun Kohlova, Charles University Environment Center, Jan Melichar, Charles University Environment Center and Milan Scasny, Charles University Environmental Center VALUATION OF ENVIRONMENTAL IMPROVEMENTS IN CONTINUOUS TIME WITH MORTALITY AND MORBIDITY EFFECTS Jon Strand, International Monetary Fund	s H S: s, al - 7: Y tt r N
08:45 - 10:30	<b>3H: FORESTRY IN DEVELOPING COUNTRIES I</b> Chairperson: Indra Sapkota, University	Room I
	IS COMMUNITY FOREST MANAGEMENT IN NEPAI EXCLUDING THE POOR? Baikuntha Aryal, Norwegian Universtiy of Life Sciences Co-Author(s): Arild Angelsen, Norwegian University of Life	

DESIGNING PAYMENTS FOR ENVIRONMENTAL SERVICES IN						
THE	CONTEXT	OF	WEAK	PROPERTY	RIGHTS	AND
COMMERCIAL INTERESTS						

Charles Palmer, ETH Zurich

Co-Author(s): Stefanie Engel, Center for Development Research, Bonn University

#### ECONOMIC EVALUATION OF POLLINATION SERVICES COMPARING COFFEE LANDSCAPES IN ECUADOR AND INDONESIA

Roland Olschewski, Institute of Forest Economics

Co-Author(s): Pablo C. Benítez, Department of Economics, Alexandra-Maria Klein, Agroecology; Göttingen University, Stefan Schwarze, Institute of Rural Development and Teja Tscharntke, Agroecology; Göttingen University

# FORESTDEPENDENCYANDHOUSEHOLDCHARACTERISTICS:EVIDENCEFROMCOMMONPROPERTYFORESTMANAGEMENTIN TERAIREGIONOFNEPALIndraSapkota,UniversityUniversityUniversity

Co-Author(s): Per Christer Oden, Swedish University of Agricultural Sciences

#### 08:45 - 10:30 **3I: ENVIRONMENTAL RISKS I** Room D Chairperson: Alexander Golub, Environmental Defense

#### STATISTICAL VS. IDENTIFIED LIVES IN BENEFIT-COST ANALYSIS

Nicolas Treich, INRA, University of Toulouse Co-Author(s): James K. Hammitt, Harvard University

DYING IN AN AVALANCHE: CURRENT RISKS AND VALUATION Andrea Leiter, alpS - Center for Natural Hazard Management/University of Innsbruck Co-Author(s): Gerald J. Pruckner, University of Innsbruck

PRESERVATION AND ENDOGENOUS UNCERTAIN FUTURE PREFERENCES

Ayong Le Kama Alain, MEDEE Université de Lille 1

AN EXPLORATION OF THE EFFECTS OF THE EMISSIONS CAP UPON INNOVATION AND WELFARE WHEN ENVIRONMENTAL DAMAGE AND ABATEMENT COSTS ARE UNCERTAIN Alexander Golub, Environmental Defense

Co-Author(s): Bostian AJ, University of Virginia, Dudek Daniel, Environmental Defense and Elena Strukova,

#### 08:45 - 10:30 3J: THE FIRM AND THE ENVIRONMENT I Room J Chairperson: Koji Kotani, Yokohama National University ADOPTION OF POLLUTION PREVENTION TECHNIQUES: THE ROLE OF MANAGEMENT SYSTEMS, DEMAND-SIDE FACTORS AND COMPLEMENTARY ASSETS

Madhu Khanna, University of Illinois at Urbana-Champaign Co-Author(s): George Deltas, University of Illinois and Donna Theresa Ramirez Harrington, University of Guelph

DIRTY MONEY: IS THERE A WAGE PREMIUM FOR WORKING IN A POLLUTION INTENSIVE JOB? Robert Elliott, University of Birmingham Co-Author(s): Matthew Cole, University of Birmingham and Joanne Lindley, University of Sheffield PROMOTION OF ECO-PRODUCTS AND ENVIRONMENTAL REGULATION WITH LEARNING-BY-DOING Koji Kotani, Yokohama National University Co-Author(s): Makoto Kakinaka, International University of Japan				
08:45 - 10:30	<b>3K: BIODIVERSITY VALUATION</b> R Chairperson: Thomas Broberg,	oom 501		
	VALUING BIODIVERSITY: A COMPARISON OF COMPENSATING SURPLUS AND COMPENSATING TAX REALLOCATION Mark Morrison, Charles Sturt University Co-Author(s): Darla Hatton MacDonald, CSIRO ENVIRONMENTAL CHANGE, SPECIES' COPING ABILITY AND BIODIVERSITY VALUE Mintewab Bezabih, Göteborg University USE OF CHOICE EXPERIMENTS IN THE DESIGN OF BIODIVERSITY CONSERVATION POLICY Paula Horne, Finnish Forest Research Institute THE VALUE OF PRESERVING THE FOUR LARGE PREDATORS IN SWEDEN: REGIONAL DIFFERENCES CONSIDERED Thomas Broberg, Co-Author(s): Runar Brännlund, Department of Economics, Umeå University			
08:45 - 10:30	3L: COST-BENEFIT ANALYSIS I Chairperson: Alan Krupnick, Resources for the Future	Room E		
	A SWEDISH CBA ON ACIDIFICATION ABATEMENT -THE CAFE BASELINE SCENARIO Mohammed Belhaj, IVL Swedish Environmental Research Institute Ltd Co-Author(s): Stefan Åström, IVL, Swedish Environmental Research Institute Ltd. and Catarina Sternhufvud, IVL Swedish Environmental Research Institute Ltd CONTINGENT VALUES AS IMPLICIT CONTRACTS – ESTIMATING MINIMUM LEGAL WILLINGNESS TO PAY FOR WILD CARNIVORES IN SWEDEN Göran Bostedt, Dept. of Forest Economics, SLU, Umeå Co-Author(s): Göran Ericsson, Dept. of Animal Ecology, SLU, Umeå and Jonas Kindberg, Dept. of Animal Ecology, SLU, Umeå ENVIRONMENTAL OBJECTIVES, COST EFFICIENCY, AND MULTIVARIATE STOCHASTIC CONTROL Chuan-Zhong Li, Uppsala University Co-Author(s): Budh Erika, The Swedish Environmental Protection Agency ARE DECISIONMAKERS AT HOME ON THE RANGE?			

	COMMUNICATING UNCERTAINTIES IN COST-BENEFIT ANALYSES Alan Krupnick, Resources for the Future Co-Author(s): Richard Morgenstern, Resources for the Future and Peter Nelson, Resources for the Future
08:45 - 10:30	<b>3M: ENVIRONMENTAL KUZNETS CURVE:</b> Room 509 <b>EMPIRICAL RESULTS I</b> Chairperson: Ashar Aftab, University of Durham
	DOES INTERNATIONAL TRADE AFFECT THE SHAPE OF THE EKC?Anna Kukla-Gryz, Warsaw UniversityDETERMINANTS OF CO2 EMISSIONS IN OPEN ECONOMIES: TESTING THE ENVIRONMENTAL KUZNETS CURVE HYPOTHESIS (1970-2000)Rui Mota, Environment and Energy Section - DEM - IST Co-Author(s): João Dias, Department of Mathematics - ISEGTHE EKC FOR SO2: DOES FIRM SIZE MATTER Tom Verbeke, Centre for Environmental Economics and Environmental Management Co-Author(s): Marc De Clercq, and Bruno Merlevede,ECONOMIC GROWTH, TRADE, AND THE ENVIRONMENT: AN ENDOGENOUS DETERMINATION OF MULTIPLE CROSS-COUNTRY REGIMESAshar Aftab, University of Durham Co-Author(s): Giovanni Baiocchi, University of Durham
08:45 - 10:30	<b>3N: AGRICULTURE I</b> Room 510 Chairperson: Mahmud Yesuf, Addis Ababa University
	<ul> <li>PREPARING FOR EXOTIC LIVESTOCK DISEASE OUTBREAKS: THE CASE OF A POTENTIAL FOOT-AND-MOUTH DISEASE OUTBREAK IN CALIFORNIA</li> <li>Mimako Kobayashi, University of California, Davis</li> <li>Co-Author(s): Tim Carpenter, School of Veterinary Medicine, University of California, Davis and Richard Howitt,</li> <li>THE EFFECT OF FARM LABOR ORGANIZATION ON IPM ADOPTION: EMPIRICAL EVIDENCE FROM THAILAND</li> <li>Justus Wesseler, Wageningen University</li> <li>Co-Author(s): Volker Beckmann, Humboldt University and Evi Irawan, Humboldt University</li> <li>EVALUATING THE IMPACT OF CAP REFORMS ON LAND USE AND THE ENVIRONMENT: A TWO-STEP ESTIMATION WITH MULTIPLE SELECTION RULES AND PANEL DATA</li> <li>Alban Thomas, INRA-LERNA, University of Toulouse</li> <li>Co-Author(s): Francois Bel, INRA Gael, University of Grenoble, Anne Lacroix, INRA, University of Grenoble and Francois Salanie, INRA-LERNA, University of Toulouse</li> <li>FARMERS' CHOICE BETWEEN PUBLIC GOODS AND AGRICULTURAL EXTENSION PACKAGES IN ETHIOPIA: A STATED PREFERENCE ANALYSIS</li> <li>Mahmud Yesuf, Addis Ababa University</li> </ul>

Geum-Soo Kim, Hoseo University
THE POLITICAL ECONOMY OF AN INTERNATIONAL ENVIRONMENTAL AGREEMENT
CORRUPTION AND THE ENVIRONMENTAL KUZNETS CURVE: EMPIRICAL EVIDENCE FOR SULFUR Alexandra Leitão, Universidade Nova de Lisboa, Faculdade de Economia
FROM CRUDE OIL DISCOVERIES Kevin Tsui, University of Chicago
ENVIRONMENTAL POLICY AS A POLITICALLY OPTIMAL CHOICE FOR ELECTORAL COMPETITION Shinya Kawahara, University of British Columbia MORE OIL, LESS DEMOCRACY?: THEORY AND EVIDENCE
<b>3P: POLITICAL ECONOMY</b> Room K         Chairperson: Geum-Soo Kim, Hoseo University       Room K
THE EFFECTS OF WARM GLOW ON SCOPE SENSITIVITY AND INCOME ELASTICITY IN CONTINGENT VALUATION SURVEY Noboru Hidano, Tokyo Institute of Technology and Shunichiro Takeshita, Tokyo Institute of Technology
Co-Author(s): Yoshizo Hashimoto, Osaka School of International Public Policy, Osaka University and Yusuke Sakata, School of Economics, Kinki University
IS INDIVIDUAL ENVIRONMETNAL CONSCIOUSNESS ONE OF THE DETERMINANTS IN TRANSPORT MODE CHOICE? Junyi Shen, Osaka School of International Public Policy, Osaka University
Co-Author(s): Tiago Domingos, Instituto Superior Técnico, SAE - DEM, Stefan Giljum, Sustainable Europe Research Institute and François Schneider, Insituto Nacional de Engenharia e Tecnologia Industrial
DESIGNING AN INDICATOR OF ENVIRONMENTAL RESPONSIBILITY João Rodrigues, Instituto Superior Técnico, SAE - DEM
Jing Zhang, University of Alberta Co-Author(s): Vic Adamowicz, University of Alberta, Diane Dupont, Brock University and Alan Krupnick, Resources for the Future
ALTRUISTIC VALUES FOR DRINKING WATER QUALITY
<b>3O: ALTRUISM AND ENVIRONMENTAL ETHICS</b> Room 554 Chairperson: Noboru Hidano, Tokyo Institute of Technology
Co-Author(s): Fredrik Carlsson, Department of Economics, Göteborg University, Gunnar Kohlin, Department of Economics, Göteborg University and Alemu Mekonnen, Addis Ababa University

10:30 - 11:00 **COFFEE BREAK** 

#### 11:00 - 12:30 **PLENARY SESSION**

11:00 - 12:30	PLENARY 2: ECONOMETRICS OF THE DYNAMICSRoom Main HallOF TROPICAL DEFORESTATIONRoom Main HallChairperson: Anastasios Xepapadeas, University of Crete and President of EAERERoom Main Hall
	ECONOMETRICS OF THE DYNAMICS OF TROPICAL DEFORESTATION Nobel Laureate Professor Sir Clive W.J. Granger, University of California - San Diego
12:30 - 14:00	LUNCH
12:30 - 14:00	EAERE GENERAL ASSEMBLY OF MEMBERS
12:30 - 14:00	EAERE GENERAL ASSEMBLY OF MEMBERSRoom DChairperson: Anastasios Xepapadeas, University of Crete and President of EAERERoom D
14:00 - 15:45	PARALLEL SESSIONS 04
14:00 - 15:45	SYMPOSIUM SESSION: 4A: INTERNATIONAL SOCIETY FOR ECOLOGICAL ECONOMICS I Chairperson: Charles Perrings , Arizona State University Organizer: Charles Perrings , Arizona State UniversityRoom C-1
	"RETHINKING THE THEORY OF DISCOUNTING AND REVEALED TIME PREFERENCE" Richard Howarth, Dartmouth College THE CARROT OR THE BIG STICK? A GAME-THEORETIC APPROACH TO THE INTEGRATION OF ENVIRONMENTAL POLICY IN THE CARIBBEAN REGION Sonja Teelucksingh,
14:00 - 15:45	SYMPOSIUM SESSION: 4B: NEW DEVELOPMENTS IN THE TRAVEL COST METHOD FOR NON-MARKET VALUATION: DEVELOPMENTS IN METHODOLOGY Chairperson: Michael Hanemann, University of California, Berkeley Organizer: Michael Hanemann, University of California, Berkeley, James Hilger, University of California,Room C-2

	AN EMPIRICAL INVESTIGATION OF ALTERNATIVE CONSIDERATION SET MODEL D. Matthew Massey, US EPA
	Co-Author(s): Roger H. von Haefen, North Carolina State University
	A SPATIAL CONTINUOUS CHOICE MODEL WITH APPLICATION TO THE PUGET SOUND REGION David Layton, University of Washington
	THE KUHN-TUCKER CORNER SOLUTION MODEL WITH THE NON-ADDITIVE SEPARABLE PREFERENCES: AN APPLICATION TO RECREATION DEMAND Koichi Kuriyama, Waseda University Co-Author(s): Michael Hanemann, University of California, Berkeley
	ON THE COMBINATION OF STATED AND REVEALED PREFERENCE IN NON-MARKET VALUATION: A FLEXIBLE MODELING APPROACH Jorge E. Araña, Univiersity of Las Palmas de Gran Canaria Co-Author(s): Carmelo J. Leon, University of Las Palmas de Gran Canaria
	UTILITY CONSISTENT FRAMEWORKS TO MODEL CORNER SOLUTIONS WITH LARGE DEMAND SYSTEMS Felipe Vasquez, University of California, Berkeley Co-Author(s): Michael Hanemann, University of California, Berkeley
14:00 - 15:45	SYMPOSIUM SESSION: 4C: POLICIES' IMPACTS ON COSTA RICAN DEFORESTATION Chairperson: Alexander Pfaff, Economics Department, Columbia University Organizer: Alexander Pfaff, Economics Department, Columbia UniversityRoom F
	PAYMENTS FOR ENVIRONMENTAL SERVICES: EMPIRICAL ANALYSIS FOR COSTA RICA Alexander Pfaff, Economics Department, Columbia University
	Co-Author(s): Robalino Juan Andres, and Arturo Sanchez, University of Alberta <b>SPATIAL INTERACTIONS IN TROPICAL DEFORESTATION</b> Robalino Juan Andres,
	Co-Author(s): Alexander Pfaff, Economics Department, Columbia University EFFECTS OF PROTECTED AREAS ON NEIGHBORING FORESTS: AN EMPIRICAL ANALYSIS OF SPILLOVERS IN COSTA RICA Robalino Juan Andres, HOW EFFECTIVE ARE PROTECTED AREAS IN SLOWING
	LAND-USE CHANGE? AN ECONOMETRIC ASSESSMENT Alexander Pfaff, Economics Department, Columbia University Co-Author(s): Kwaw Andam, Georgia State University, Paul Ferraro, Georgia State University and Arturo Sanchez, University of

	Alberta	
14:00 - 15:45	<b>4D: BIODIVERSITY II</b> Chairperson: Jinhua Zhao, Iowa State University	Room G
	<ul> <li>PRICES AND SPECIES DIVERSITY - STOCHASTIC EFFICIENCY MODELING</li> <li>Johannes Sauer, Institute for Food and Resource Economics Royal Veterinary and Agricultural University Copenhagen</li> <li>INTEGRATING BIRD FAUNA VALUES INTO DECISION-MAKING TO CONSERVE BIODIVERSITY ON FARMLAND</li> <li>Antti Miettinen, MTT Agrifood Research Finland</li> <li>Co-Author(s): Anni Huhtala, MTT Agrifood Research Finland</li> <li>ESTIMATION OF BIODIVERSITY PRODUCTION COSTS.</li> <li>Nilsson Fredrik, Swedish University of Agricultural Sciences</li> <li>DOUBLE IRREVERSIBILITIES AND ENDOGENOUS LEARNING IN LAND CONVERSION DECISIONS</li> <li>Jinhua Zhao, Iowa State University</li> </ul>	5, G
14:00 - 15:45	<b>4E: CGE MODELS I</b> Chairperson: Yingna Huang, Research Center of Environmental Engineering and Management, Graduate school of Shenzhen, Tsinghua University	Room H
14.00 15.45	<ul> <li>MARGINAL ABATEMENT COST CURVES IN GENERA EQUILIBRIUM: THE INFLUENCE OF WORLD MARKET PRICES Gernot Klepper, Institut fuer Weltwirtschaft Co-Author(s): Sonja Peterson,</li> <li>THE ECONOMIC IMPACT OF RESTRICTED WATER SUPPLY: COMPUTABLE GENERAL EQUILIBRIUM ANALYSIS Katrin Rehdanz, Hamburg University and ZMAW Co-Author(s): Maria Berrittella, University of Palermo, Arjen Y Hoekstra, University of Twente, Roberto Roson, Ca"Fosca University, Venice and FEEM and Richard S.J. Tol, Hambur University</li> <li>CLIMATE CHANGE POLICY OF BIOENERGY: A CG MODELING OF BIOENERGY'S SECTORAL AND LAND-US INTERFACES</li> <li>Rahimaisa Abdula, University of Gothenburg</li> <li>QUANTITATIVE ANALYSIS ON THE EFFECTS OF TH IMPLEMENTATION OF ENERGY-ENVIRONMENT TAXES I CHINA: AN APPLICATION OF CGE MODEL</li> <li>Yingna Huang, Research Center of Environmental Engineering an Management, Graduate school of Shenzhen, Tsinghua University</li> </ul>	<b>S</b> <b>A</b> Y. ri g <b>E</b> <b>E</b> <b>N</b> d
14:00 - 15:45	<b>4F: CLIMATE CHANGE I</b> Chairperson: Ralf Steinhauser, UC Berkeley	Room B-2
	CLIMATE CHANGE, ENERGY DEMAND AND MARKET POWE IN A GENERAL EQUILIBRIUM MODEL OF THE WORL ECONOMY Roberto Roson, Ca"Foscari University, Venice and FEEM	

	<ul> <li>Co-Author(s): Francesco Bosello, Fondazione ENI Enrico Mattei and Richard S.J. Tol, Hamburg University</li> <li>NON-BINDING TARGETS FOR INTERNATIONAL EMISSIONS TRADING UNDER UNCERTAINTY</li> <li>Frank Jotzo, Australian National University</li> <li>Co-Author(s): Jack Pezzey, Australian National University</li> <li>IMPURE PUBLIC GOODS AND TECHNOLOGICAL INTERDEPENDENCIES</li> <li>Dirk T.G. Rübbelke, Chemnitz University of Technology</li> <li>Co-Author(s): Andreas Löschel, European Commission, DG Joint Research Centre, Institute for Prospective Technological Studies (IPTS)</li> <li>SNOOPING KUZNETS: WE JUST RAN A BILLION REGRESSIONS FORECASTING US CO2 EMISSIONS USING STATE-LEVEL DATA</li> <li>Ralf Steinhauser, UC Berkeley</li> <li>Co-Author(s): Maximilian Auffhammer, University of California, Berkeley</li> </ul>	
14:00 - 15:45	4G:CONTINGENTVALUATION:METHODOLOGICAL ASPECTS IIChairperson: Felix Schläpfer, University of Zurich	Room I
	<ul> <li>ANALYSIS AND INSIGHTS FROM INTERVAL OPEN-ENDED DATA IN CONTINGENT VALUATION</li> <li>Cecilia Håkansson, Department of Forest Economics- SLU</li> <li>THE ROLE OF PARTICIPATION IN CVM SURVEY DESIGN: EVIDENCE FROM A TAP WATER IMPROVEMENT PROGRAM IN NORTHERN THAILAND</li> <li>Michael Ahlheim, University of Hohenheim</li> <li>Co-Author(s): Oliver Froer, University of Hohenheim and Nopasom Sinphurmsukskul, Chiang Mai University</li> <li>HOUSEHOLD VERSUS INDIVIDUAL VALUATION: WHAT'S THE DIFFERENCE?</li> <li>Alistair Munro, Royal Holloway University of London Co-Author(s): Ian J. Bateman, University of East Anglia</li> <li>THEORETICAL INCENTIVE PROPERTIES OF CONTINGENT VALUATION QUESTIONS: DO THEY MATTER IN THE FIELD?</li> <li>Felix Schläpfer, University of Zurich Co-Author(s): Ingo Bräuer, UFZ Center for Environmental Research, Leipzig-Halle</li> </ul>	
14:00 - 15:45	4H: EXPERIMENTS IN ENVIRONMENTAL ECONOMICS II Chairperson: Javier Calatrava-Requena, Head of Department of Agricultural Economics	Room J
	WARM GLOW OR HELPING HAND?: THE ROLE OF INCENTIVE COMPATIBILITY IN VOLUNTARY CONTRIBUTIONS Koji Kotani, Yokohama National University Co-Author(s): Kent Messer, Cornell University and William Schulze, Cornell University	

	THE STATUS QUO OPTION IN CHOICE EXPERIMENT: EVIDENCE FROM FOREST MANAGEMENT Alain Carpentier, INRA Co-Author(s): Francois Bonnieux, INRA BAYESIAN BENEFIT TRANSFERS FOR CHOICE EXPERIMENT
	<b>DATA</b> Javier Calatrava-Requena, Head of Department of Agricultural Economics
	Co-Author(s): Sergio Colombo, Andalusian Institute of Agricultural Economics, Nick Hanley, University of Stirling and ulrike lehr, Institute of technical thermodynamics
14:00 - 15:45	<b>4I: NON-TIMBER FOREST PRODUCTS I</b> Room 509Chairperson: Claudio O. Delang, Centre for SoutheastAsian Studies, Kyoto University
	CYCLONE RELIEF AND NATURAL RESOURCE USE AS A SAFETY NET IN FIJI
	Yoshito Takasaki, University of Tsukuba BIODIVERSITY POLICIES IN COMMERCIAL BOREAL FORESTS: OPTIMAL DESIGN OF SUBSIDY AND TAX COMBINATIONS
	Markku Ollikainen, University of Helsinki FUELWOOD, FORESTS AND COMMUNITY MANAGEMENT – EVIDENCE FROM HOUSEHOLD STUDIES Priscilla Cooke St. Clair, Pacific Lutheran University
	Co-Author(s): William F. Hyde, Göteborg University and Gunnar Kohlin, Department of Economics, Göteborg University THE ECONOMIC EVALUATION OF NON-MARKETED
	NON-TIMBER FOREST PRODUCTS: A CASE STUDY OF THE PWO KAREN IN THAILAND Claudio O. Delang, Centre for Southeast Asian Studies, Kyoto University
14:00 - 15:45	4J: URBAN ENVIRONMENTAL PROBLEMSRoom 501Chairperson: Craig Bullock, University College Dublin
	<b>POLLUTION AND GROWTH IN MEGACITIES</b> Martin F. Quaas, UFZ - Center for Environmental Research Leipzig-Halle
	SUSTAINABILITY OF URBAN SPRAWL: ENVIRONMENTAL-ECONOMIC INDICATORS FOR THE ASSESSMENT OF MOBILITY IN ITALY Chiara Maria Travisi, POLITECNICO DI MILANO, Fondazione Eni
	Enrico Mattei Co-Author(s): Roberto Camagni, Politecnico di Milano and Peter Nijkamp, Free University of Amsterdam
	FUEL TAX IMPACTS TO REDUCE URBAN AIR POLLUTION IN THE DEVELOPING COUNTRY Lei Yang, Graduate School for International Development and Cooperation, Hiroshima University
	THE ROLE AND USE OF URBAN OPEN SPACE:

## HYPOTHETICAL ALTERNATIVES AND THE STATUS-QUO Craig Bullock, University College Dublin

14:00 - 15:45	<b>4K: SUSTAINABLE DEVELOPMENT I</b> Room B-1           Chairperson: Craig Bond, Colorado State University         Room B-1
	SUSTAINABLE DEVELOPMENT: CONCEPTUALIZATIONS AND MEASUREMENT
	Charles Mueller, Department of Economics, Un. of Brasilia INVARIANCE IN GROWTH THEORY AND SUSTAINABLE DEVELOPMENT Vincent Martinet, IFREMER
	Co-Author(s): Gilles Rotillon, Université Paris X Nanterre CIRCULAR ECONOMY: A NEW DEVELOPMENT STRATEGY
	FOR SUSTAINABLE DEVELOPMENT IN CHINA Lei Shi, State Key Laboratory of Pollution Control and Resource Reuse, School of Environment, Nanjing University
	Co-Author(s): Jun BI, Nanjing University and Lu XING, State Key Laboratory of Pollution Control and Resource Reuse, School of Environment, Nanjing University
	EFFICIENCY AND EQUITY: SUSTAINABILITY TRADEOFFS IN AN AGROECOSYSTEM MODEL Craig Bond, Colorado State University
14:00 - 15:45	<b>4L: STRATEGIC TRADE AND ENVIRONMENTAL</b> Room 553 <b>POLICIES</b> Chairperson: Shuichi Ohori, Kyoto Institute of EconomicResearch, Kyoto University
	STRATEGIC CLIMATE POLICY FOR SMALL, OPEN ECONOMIES Mads Greaker, Research Department Statistics Norway
	Co-Author(s): Knut Einar Rosendahl, Statistics Norway TRADE, STRATEGIC ENVIRONMENTAL POLICY, AND GLOBAL POLLUTION
	Akihiko Yanase, Takasaki City University of Economics STRATEGIC ENVIRONMENTAL AND TRADE POLICIES WITH CORPORATE ENVIRONMENTALISM
	Naoto Jinji, Okayama University ENVIRONMENTAL TAX AND TRADE LIBERALIZATION IN A MIXED DUOPOLY
	Shuichi Ohori, Kyoto Institute of Economic Research, Kyoto University
14:00 - 15:45	4M: TRADABLE PERMITS IIRoom EChairperson: Eirik S. Amundsen, Department of economics, University of Bergen and The Royal Veterinary and Agricultural UniversityRoom E
	DO EMISSION PERMITS MARKETS' ORIGINAL ADVANTAGES STILL HOLD? Maria Fernandes, Escola Superior de Tecnologia e Gestão,

	Instituto Politecnico de Leiria Co-Author(s): Anabela Botelho, Universidade do Minho and Lígia Pinto, Universidade do Minho <b>VERIFICATION OF FIRM DATA IN EMISSIONS TRADING</b> <b>SCHEMES UNDER ALTERNATIVE PENALTIES FOR</b> <b>OVERSTATEMENTS</b> Frauke Eckermann, University of Dortmund <b>THE AIR POLLUTION EMISSION RIGHTS MARKET IN THE EU</b> <b>AND MORAL HAZARD</b> Francisco Alvarez, Co-Author(s): Ester Camina, Universidad Complutense de Madrid <b>PRICE VOLATILITY AND BANKING IN GREEN CERTIFICATE</b> <b>MARKETS</b> Eirik S. Amundsen, Department of economics, University of Bergen and The Royal Veterinary and Agricultural University Co-Author(s): Fridrik M. Baldursson, University of Iceland and Jørgen Birk Mortensen, Department of Economics, University of Copehagen
14:00 - 15:45	4N: WASTE MANAGEMENT AND RECYCLING IRoom D(KYOTO UNIVERSITY COE SESSION)Room DChairperson: Elisabetta Strazzera, DRES, University of CagliariCagliari
	<ul> <li>A RELATIVE NATURE OF GOODS AND BADS IN TRANSACTION OF WASTE MATERIAL</li> <li>Eiji Hosoda , Keio University</li> <li>AN ECONOMIC ANALYSIS OF MIXING WASTES</li> <li>Herman Vollebergh, Tinbergen Institute and Erasmus University Rotterdam</li> <li>Co-Author(s): Rob Aalbers, SEO</li> <li>AN INCOMPLETE DECISION HIERARCHY APPLICATION TO AN ENVIRONMENTAL POLICY-MAKING PROCESS</li> <li>Chun-hsu Lin, Chung-hua Institute for Economic Research</li> <li>APPLYING THE ML HAUSMAN APPROACH TO THE DEMAND OF WATER FOR RESIDENTIAL USE: HETEROGENEITY VS TWO-ERROR MODEL</li> <li>Elisabetta Strazzera, DRES, University of Cagliari</li> </ul>
14:00 - 15:45	40: THEORETICAL ASPECTS OF ENVIRONMENTAL REGULATIONRoom 510Chairperson: Irina Glazyrina, Institute of Natural Resources of the Russian Academy of Sciences and Past President of the Russian Society of Ecological EconomicsRoom 510
	ON PRECAUTIONARY POLICIES Bernard Sinclair-Desgagné, HEC Montréal Co-Author(s): Barrieu Pauline, London School of Economics ENVIRONMENTAL TAXATION WITH ENDOGENOUS CHOICE OF ENVIRONMENTAL QUALITY Eftichios Sartzetakis, University of Macedonia

	Co-Author(s): Christos Constantatos, University of Macedonia and Christos Pargianas, Brown University DESIGNING AND IMPLEMENTING REGULATORY POLICIES FOR COMPLEX EXTERNALITIES: THE CASE OF AGRICULTURAL POLLUTION Ashar Aftab, University of Durham NEW APPROACH TO THE POLLUTER PAYS PRINCIPLE IMPLEMENTATION Irina Glazyrina, Institute of Natural Resources of the Russian Academy of Sciences and Past President of the Russian Society of Ecological Economics
14:00 - 15:45	<b>4P: GAME THEORY AND THE ENVIRONMENT I</b> Room 554Chairperson: Philippe Bontems, University of Toulouse (INRA and IDEI)Room 554
	<ul> <li>AN INFINITE-HORIZON MODEL OF DYNAMIC MEMBERSHIP OF INTERNATIONAL ENVIRONMENTAL AGREEMENTS</li> <li>Alistair Ulph, University of Manchester</li> <li>Co-Author(s): Santiago Rubio, university of valencia</li> <li>ENVIRONMENTAL REGULATION AS A COORDINATION DEVICE FOR THE INTRODUCTION OF A GREEN PRODUCT: THE PORTER'S HYPOTHESIS REVISITED.</li> <li>Christos Constantatos, University of Macedonia</li> <li>Co-Author(s): Philippe Barla, Dépt.d'économique and GREEN, Université Laval and Markus Herrmann, Université de Montréal</li> <li>THE ECONOMICS OF TERRITORIAL USE RIGHTS REGULATIONS: A GAME THEORETIC APPROACH</li> <li>Mauricio Villena, School of Business, Adolfo Ibáñez University. Chile</li> <li>Co-Author(s): Carlos Chavez, Department of Economics, Concepcion University, Chile.</li> <li>OPTIMAL CONCESSION OF WATER SERVICES UNDER COMMON VALUE</li> <li>Philippe Bontems, University of Toulouse (INRA and IDEI)</li> <li>Co-Author(s): Cécile Aubert, University of Toulouse</li> </ul>
14:00 - 15:45	4Q: IMPERFECT COMPETITIONRoom KChairperson:CY.CynthiaLin,DepartmentofEconomics,Harvard University
	PRODUCT DIFFERENTIATION IN THE PRESENCE OF ENVIRONMENTAL CONCERN, NETWORK EFFECTS AND COMPATIBILITY: THE AUTOMOBILE MARKET Klaus Conrad, University of MannheimREGULATORYDECISIONSINMARKET-BASED ENVIRONMENTAL POLICIES POLICIES WHEN MARKET POWER IS PRESENTDafna M. DiSegni Eshel , Tel Aviv University, Israel Co-Author(s): SEXTON RICHARD, University of California, DavisDO FIRMS INTERACT STRATEGICALLY?:

## ANALYSIS OF INVESTMENT TIMING DECISIONS IN OFFSHORE PETROLEUM PRODUCTION

C.-Y. Cynthia Lin, Department of Economics, Harvard University

15:45 - 16:15	COFFEE BREAK
16:15 19:00	PARALLEL SESSIONS 05
16:15 - 18:00 	PARALLEL SESSIONS 03
16:15 - 18:00	SYMPOSIUM SESSION: 5A: INTERNATIONALRoom B-2SOCIETY FOR ECOLOGICAL ECONOMICS IIRoom B-2Chairperson: Charles Perrings , Arizona StateUniversityOrganizer: Charles Perrings , Arizona State UniversityOrganizer: Charles Perrings , Arizona State University
	<ul> <li>A MODEL OF BIODIVERSITY AND PRODUCTIVITY IN INTENSIVE AGRICULTURE</li> <li>Unai Pascual, University of Cambridge - Land Economy Department</li> <li>Co-Author(s): Amani Omer, University of Manchester and Noel Russell, School of Economic Studies - University of Manchester</li> <li>THE PRIVATE AND PUBLIC INSURANCE VALUE OF CONSERVATIVE BIODIVERSITY MANAGEMENT</li> <li>Stefan Baumgärtner, University of Heidelberg</li> <li>Co-Author(s): Martin F. Quaas, UFZ - Center for Environmental Research Leipzig-Halle</li> <li>RESILIENCE, DIVERSITY AND THE SUSTAINABILITY OF ECONOMIC DEVELOPMENT</li> <li>Charles Perrings , Arizona State University</li> </ul>
16:15 - 18:00	SYMPOSIUM SESSION: 5B: NEW DEVELOPMENTS IN THE TRAVEL COST METHOD FOR NON-MARKET VALUATION: NEW EMPIRICAL FINDINGS Chairperson: Michael Hanemann, University of California, Berkeley Organizer: Michael Hanemann, University of California, Berkeley, James Hilger, University of California, Berkeley and Koichi Kuriyama, Waseda UniversityRoom C-2
	ALCOHOL CONSUMPTION: BALANCING FUN AND DANGER WHILE DRIVING OFF HIGHWAY VEHICLES Jeffrey Englin, University of Nevada Co-Author(s): Juan Marcos Gonzalez-Sepulveda, Colorado State University and Thomas Holmes, US Forest Service HETEROGENEOUS PREFERENCES FOR WATER QUALITY: A FINITE MIXTURE MODEL OF BEACH RECREATION IN SOUTHERN CALIFORNIA Michael Hanemann, University of California, Berkeley and James Hilger, University of California, Berkeley DISTRIBUTIONAL CONSEQUENCES OF FEES IN A DISCRETE

#### CHOICE MODEL OF RECREATION DEMAND WITH INCOMPLETE DATA: AN APPLICATION TO MODE-SPECIFIC FISHING

Kim Hwa Nyeon, Texas A&M University

Co-Author(s): Wade L. Griffin, Texas A&M University, W. Douglass Shaw, Texas A&M and Richard Woodward, Dept. of Ag. Economics, Texas A&M Univ.

AGGREGATION BIAS IN WELFARE CALCULATION WITH DISCRETE CHOICE MODELS: THE FALLACY OF THE REPRESENTATIVE INDIVIDUAL

Craig Mohn, Cascade Econometrics

Co-Author(s): Michael Hanemann, University of California, Berkeley and Linwood Pendleton, University of California Los Angeles

THE DISTRIBUTIONAL IMPACTS OF RECREATIONAL FEES: A DISCRETE CHOICE MODEL WITH INCOMPLETE DATA

Richard Woodward, Dept. of Ag. Economics, Texas A&M Univ. Co-Author(s): Hwa Nyeon Kim, Texas A&M University and W. Douglass Shaw, Texas A&M

16:15 - 18:00	<b>5C: ECONOMIC HISTORY</b> Room D Chairperson: David Good, Indiana University - Bloomington
	PRECIOUS METALS: INSTITUTIONAL EXPLANATIONS OF ECONOMIC DEVELOPMENT Elissaios Papyrakis, Institute for Environmental Studies, Vrije
	Universiteit Amsterdam and School of Economics and Finance, St Andrews Co-Author(s): Reyer Gerlagh, Institute for Environmental Studies, Vrije Universiteit Amsterdam
	LONG RUN TRENDS IN ENERGY SERVICES, 1300-2000 Roger Fouquet, University of the South Pacific Co-Author(s): Peter J.G. Pearson, Imperial College London
	MATERIAL STOCK AND WASTE GENERATION BY HUMAN ACTIVITIES OVER THE PAST 100 YEARS Reina Kawase, Kyoto University Co-Author(s): Yuzuru Matsuoka, Kyoto University and Toru Murase, Kyoto University
	<b>CIVILIZATIONS AND OPTIMAL SOCIAL COLLAPSE</b> David Good, Indiana University - Bloomington Co-Author(s): Rafael Reuveny, Indiana University
16:15 - 18:00	<b>5D: ENERGY AND EFFICIENCY</b> Room FChairperson: Klaus Conrad, University of Mannheim
	MEASURING TECHNICAL AND ENVIRONMENTAL EFFICIENCY OF THERMAL POWER GENERATION IN INDIA: AN APPLICATION OF DIRECTIONAL DISTANCE FUNCTION Kishore Kumar Dhavala, Institute of Economic Growth Co-Author(s): Surender Kumar, TERI School of Advanced Studies and Murty M N, Institute of Economic Growth DETERMINANTS OF ENVIRONMENTAL EFFICIENCY:

	ENVIRONMENTAL MANAGEMENT CAPACITY AND OPERATIONAL CHARACTERISTICS IN CHINA FS ELECTRICITY INDUSTRY Katsuya Tanaka, Hiroshima University Co-Author(s): Chazhong Ge, Chinese Academy for Environmenta Planning, Shunji Matsuoka, Hiroshima University and Manam Suga, Hiroshima University RESOURCE USE EFFICIENCY OF US ELECTRICITY GENERATING PLANTS DURING THE SO2 TRADING REGIME A DISTANCE FUNCTION APPROACH Surender Kumar, TERI School of Advanced Studies Co-Author(s): Shreekant Gupta, Delhi School of Economics THE OPTIMAL PATH OF ENERGY AND CO2 TAXES FOR INTERTEMPORAL RESOURCE ALLOCATION AND IMPROVED ENERGY EFFICIENCY Klaus Conrad, University of Mannheim	
16:15 - 18:00	<b>5E: INNOVATION I</b> Chairperson: Frank C. Krysiak, Technische Universität Berlin	Room G
	DETERMINANTS OF ENVIRONMENTAL INNOVATION – NEW EVIDENCE FROM GERMAN PANEL DATA SOURCES Jens Horbach, University of Applied Sciences Anhalt ENVIRONMENTAL INNOVATION AND THE COST OF POLLUTION ABATEMENT Thierry Bréchet, CORE - UCL Co-Author(s): Pierre-André Jouvet, EconomiX and CORE INTEGRATED PRODUCT POLICY AND ENVIRONMENTAL PRODUCT INNOVATIONS: AN EMPIRICAL ANALYSIS Klaus Rennings, Centre for European Economic Research (ZEW) Co-Author(s): Katharina-Maria Rehfeld, Delegation of Germar Industry & Commerce Shanghai and Andreas Ziegler, Centre for European Economic Research GmbH (ZEW) PRICES VS. QUANTITIES: THE LONG-RUN EFFECTS ON TECHNOLOGY CHOICE Frank C. Krysiak, Technische Universität Berlin	- - r
16:15 - 18:00	<b>5F: INVASIVE SPECIES</b> Chairperson: Sittidaj Pongkijvorasin, University of Hawaii	Room H
	AN ANALYSIS OF ECONOMIC COST MINIMIZATION AND BIOLOGICAL INVASION DAMAGE CONTROL USING THE AWO CRITERION Amit Batabyal, Rochester Institute of Technology Co-Author(s): Gregory DeAngelo, University of California at Santa Barbara and Seshavadhani Kumar, Rochester Institute of Technology ON THE ECONOMICS OF INVASIVE PLANT: THE CASE OF CALIFORNIAN THISTLE IN NEW ZEALAND. Morteza Chalak, Environmental Economics and Natura Resources, Wageningen University	e f <del>-</del>

	Co-Author(s): Graeme Bourdot, Lincon ag-research centre Leathwick Dave, Agresearch and Ekko van Ierland, Environmenta Economics and Natural Resources, Wageningen University <b>SEARCHING UNDER THE LAMPPOST: OPTIMA</b> <b>INTERDICTION AND REMOVAL OF THE INVASIVE SPECIES</b> <b>BROWN TREESNAKE IN HAWAII</b> Sean D''Evelyn, University of Hawaii at Manoa Co-Author(s): Kimberly Burnett, University of Hawaii, Brook Kaiser, Gettysburg College, Porntawee Nantamanasikarr University of Hawaii at Manoa and Jim Roumasset, University of Hawaii at Manoa <b>TERRORISM AND THE ECONOMICS OF BIOLOGICA</b> <b>INVASIONS</b> Sittidaj Pongkijvorasin, University of Hawaii Co-Author(s): Lee Endress, Asia-Pacific Center for Securit Studies	al S s n, of L
16:15 - 18:00	<b>5G: RECREATIONAL ACTIVITIES I</b> Chairperson: Stephen Hynes, Rural Economy Research Centre, Teagasc	Room K
	<ul> <li>THE RECREATIONAL VALUE OF FORESTS IN A TRANSITION ECONOMY</li> <li>Anna Bartczak, Warsaw University</li> <li>Co-Author(s): Tomas Zylicz, University of Warsaw</li> <li>STRUCTURAL VERSUS REDUCED FORM MODELS FOR VALUING WATER QUALITY CHANGES IN A COASTA RECREATIONAL FISHERY</li> <li>Steve Newbold, US EPA</li> <li>Co-Author(s): D. Matthew Massey, US EPA</li> <li>LATENT CLASS COUNT MODELS OF TOTAL VISITATION DEMAND: DAYS OUT IN THE EASTERN ALPS</li> <li>Mara Thiene, Dept. Territorio e Sistemi Agroforestali</li> <li>Co-Author(s): Riccardo Scarpa , Waikato Management School an Tiziano Tempesta , Dep.TESAF</li> <li>USING CONTINUOUS AND FINITE MIXTURE MODELS TO ACCOUNT FOR PREFERENCE HETEROGENEITY II WHITEWATER KAYAKING</li> <li>Stephen Hynes, Rural Economy Research Centre, Teagasc Co-Author(s): Nick Hanley, University of Stirling and Catha O'Donoghue, RERC, Teagasc</li> </ul>	R L N d D N
16:15 - 18:00	5H: SUSTAINABLE DEVELOPMENT II Chairperson: Edward Barbier, University of Wyoming	Room E
	SUBSTITUTABILITY OF RESOURCE USE IN PRODUCTION AND CONSUMPTION Yoko Nagase, Lawrence University Co-Author(s): Tasneem Mirza, Purdue University VALUING ECOLOGICAL RESILIENCE: IMPLICATIONS FOR WELFARE, WEALTH AND SUSTAINABLE DEVELOPMENT Michael Harris, University of Sydney	

	USING DATA ENVELOPMENT ANALYSIS TO ASSESS THE RELATIVE EFFICIENCY OF DIFFERENT CLIMATE POLICY SCENARIOS Barbara Buchner, Fondazione Eni Enrico Mattei Co-Author(s): Valentina Bosetti, FEEM FRONTIERS AND SUSTAINABLE ECONOMIC DEVELOPMENT Edward Barbier, University of Wyoming
16:15 - 18:00	5I: RENEWABLE RESOURCES Room I Chairperson: Tomoki Fujii, Singapore Management University
	<ul> <li>FOREST MANAGEMENT: WHEN IS IT DESIRABLE TO HAVE DOUBLE ROTATIONS?</li> <li>Pierre Lasserre, Universite du Quebec a Montreal</li> <li>MULTIPLICITY OF STOCKS AND OPTIMAL USE OF A FOREST RESOURCE</li> <li>Chander Shahi, University of Toronto</li> <li>Co-Author(s): Shashi Kant, University of Toronto</li> <li>OPTIMAL MANAGEMENT OF A RENEWABLE ENERGY SOURCE UNDER UNCERTAINTY</li> <li>Catherine Bobtcheff, University of Toulouse I, LERNA, CEA</li> <li>NUMERICAL ANALYSIS OF NON-CONSTANT DISCOUNTING WITH AN APPLICATION TO RENEWABLE RESOURCE MANAGEMENT</li> <li>Tomoki Fujii, Singapore Management University</li> <li>Co-Author(s): Larry Karp, University of California at Berkeley</li> </ul>
16:15 - 18:00	5J: THE FIRM AND THE ENVIRONMENT II Room J Chairperson: Catarina Sternhufvud, IVL Swedish Environmental Research Institute Ltd
	<ul> <li>CAN POLLUTION CONTROL FROM SMALL SCALE UNITS BE CONTROLLED?</li> <li>Haripriya Gundimeda, Associate Professor, Madras School of Economics</li> <li>Co-Author(s): Vinish Kathuria, Associate Professor</li> <li>STRIVING TO BE GREEN: THE ADOPTION OF TOTAL QUALITY ENVIRONMENTAL MANAGEMENT</li> <li>Donna Theresa Ramirez Harrington, University of Guelph Co-Author(s): George Deltas, University of Illinois and Madhu Khanna, University of Illinois at Urbana-Champaign</li> <li>THE IMPORTANCE OF NON-TECHNICAL MEASURES FOR EMISSION ABATEMENT, A META-REGRESSION ANALYSIS</li> <li>Catarina Sternhufvud, IVL Swedish Environmental Research Institute Ltd</li> <li>Co-Author(s): Stefan Åström, IVL, Swedish Environmental Research Institute Ltd. and Mohammed Belhaj, IVL Swedish Environmental Research Institute Ltd</li> </ul>
16:15 - 18:00	<b>5K: VALUATION: STATED PREFERENCES</b> Room 501         Chairperson: Jorge E. Araña, Univiersity of Las Palmas       de Gran Canaria

16:15 - 18:00	5M:ENVIRONMENTALKUZNETSCURVE:Room 509ADVANCED EMPIRICAL APPROACHESChairperson:Marzio Galeotti, University of Milan
	<ul> <li>POLICY CONSIDERATIONS Jay Anderson, University of Alberta Co-Author(s): Martin Luckert, University of Alberta COMPENSATION CLAIMS IN VOLUNTARY FOREST CONSERVATION: A CASE OF PRIVATE OWNED FORESTS IN FINLAND Erkki Mäntymaa, Department of Economics, University of Oulu Co-Author(s): Artti Juutinen, Department of Economics, University of Oulu, Mikko Mönkkönen, Department of Biological and Environmental Science, University of Jyväskylä and Rauli Svento, Department of Economics, University of Oulu HOW TIMBER HARVESTING AND BIODIVERSITY ARE MANAGED IN UNEVEN-AGED FORESTS? A CLUSTER-SAMPLE ECONOMETRIC APPROACH SERGE GARCIA, INRA - Laboratory of Forest Economics Co-Author(s): Max Bruciamacchie, ENGREF - Laboratory Forest Economics</li> </ul>
16:15 - 18:00 	5L: FORESTRY IN INDUSTRIALISED COUNTRIES       Room 510         Chairperson: SERGE GARCIA, INRA - Laboratory of       Forest Economics         CAN HYBRID POPLAR SAVE INDUSTRIAL FORESTRY IN       CANADA'S BOREAL FOREST?: A FINANCIAL ANALYSIS AND
	<ul> <li>METHODS TO ASSESS THE PRIVATE VALUE OF AGROBIODIVERSITY IN HUNGARIAN HOME GARDENS</li> <li>Ekin Birol, University of Cambridge</li> <li>Co-Author(s): Andreas Kontoleon, Department of Land Economy, University of Cambridge and Melinda Smale,</li> <li>PROTECTING THE ENVIRONMENT FOR THE SAKE OF PROTECTING THE ENVIRONMENT: EVIDENCE OF EXISTENCE</li> <li>VALUE FROM THE RIBEIRINHO COMMUNITIES OF AMAZONAS, BRAZIL</li> <li>James Kahn, Washington and Lee University and Universidade Federal do Amazonas</li> <li>SCALE PERCEPTION IN THE VALUATION OF ENVIRONMENTAL RISKS AND PROBABILITY NEGLECT</li> <li>Jorge E. Araña, Univiersity of Las Palmas de Gran Canaria</li> <li>Co-Author(s): Carmelo J. Leon, University of Las Palmas de Gran Canaria</li> </ul>
	A COMPARISON OF THE COMPLEXITY OF CONTINGENT GROUPING AND CONTINGENT RANKING Raul Brey, Pablo de Olavide University Co-Author(s): Pere Riera, Department of Applied Economics, Autonomous University of Barcelona, E-08193 Bellaterra, Spain. COMBINING REVEALED AND STATED PREFERENCE

	<ul> <li>IDENTIFYING REDUCED FORM RELATIONS WITH PANE DATA: THE CASE OF AN EKC FOR CO2</li> <li>Herman Vollebergh, Tinbergen Institute and Erasmus Universit Rotterdam</li> <li>Co-Author(s): Elbert Dijkgraaf, Tinbergen Institute and Bertran Melenberg, Tilburg University CentER</li> <li>DOES EKC EXIST IN THE YANGTZE RIVER DELTA? -A CASE STUDY WITH UNIT ROOT AND COINTEGRATION TESTS</li> <li>Lu XING, State Key Laboratory of Pollution Control and Resource Reuse, School of Environment, Nanjing University</li> <li>Co-Author(s): Jun BI, Nanjing University and Lei Shi, State Ke Laboratory of Pollution Control and Resource Reuse, School of Environment, Nanjing University</li> <li>THE RELATIONSHIP BETWEEN GROWTH AND ENVIRONMENT: SHOULD WE BE LOOKING FOR TURNING OF</li> </ul>	y d E e y of
	BREAK POINTS? Giovanni Baiocchi, University of Durham ON THE ROBUSTNESS OF ROBUSTNESS CHECKS OF THE ENVIRONMENTAL KUZNETS CURVE Marzio Galeotti, University of Milan Co-Author(s): Alessandro Lanza, FEEM and Matteo Manera University of Milan-Bicocca	
16:15 - 18:00	<b>5N: RIVER MANAGEMENT</b> Chairperson: Anna Heaney, Australian Bureau of Agricultural and Resource Economics	Room 553
	COST EFFECTIVENESS IN RIVER MANAGEMENT EVALUATION OF INTEGRATED RIVER POLICY SYSTEM IN TIDAL OUSE Tao Wang, Environment Dept, the University of York	N
	THE ECONOMIC VALUE OF WATER IN THE GANGES-BRAHMAPUTRA-MEGHNA RIVER BASIN Nasima Chowdhury, Department of Economics, Gothenbur University, Gothenburg, Sweden	_
	GLOBAL CHANGE AND THE EFFECTS ON INDUSTRIA WATER USE IN THE CATCHMENT AREA OF THE UPPER DANUBE	R
	Matthias Egerer, ifo Institute for Economic Research and Marku Zimmer, ifo Institute for Economic Research FLOW OBJECTIVES, UNCERTAINTY AND ENVIRONMENTA WATER DEMANDS: A PLANNING FRAMEWORK	L
	Anna Heaney, Australian Bureau of Agricultural and Resourc Economics Co-Author(s): Stephen BEARE, Australian Bureau of Agricultura and Resource Economics	
16:15 - 18:00	50: KYOTO AND BEYOND Chairperson: Andreas Lange, University of Maryland	Room B-1
	WHY THE CDM WILL REDUCE CARBON LEAKAGE Steffen Kallbekken, CICERO - Center for International Climate an Environmental Research - Oslo	d

	Co-Author(s): Line Sunniva Flottorp, CICERO and Nathan Rive, CICERO
	HOT AIR FOR SALE: A QUANTITATIVE ASSESSMENT OF RUSSIA'S NEAR-TERM CLIMATE POLICY OPTIONS Ulf Moslener, ZEW, Centre for European Economic Research Co-Author(s): Christoph Böhringer, Centre for European Economic Research and Bodo Sturm, Centre for European Economic Research (ZEW)
	GLOBAL CLIMATE POLICY IN A POST-KYOTO WORLD Georg Muller-Furstenberger, Applied Microeconomics, Bern University Co-Author(s): Gunter Stephan, Applied Microeconomics, Bern University
	ON THE IMPORTANCE OF EQUITY IN INTERNATIONAL CLIMATE POLICY: AN EMPIRICAL ANALYSIS Andreas Lange, University of Maryland Co-Author(s): Vogt Carsten, Centre for European Economic Research (ZEW) Mannheim and University of Applied Sciences Leipzig and Andreas Ziegler, Centre for European Economic Research (ZEW)
16:15 - 18:00	5P:SOCIALNORMSANDSOCIALRoom 554RESPONSIBILITY IChairperson:César Marcelo Viteri Mejia, Mentefactura
	ON SOCIAL SANCTIONS AND BELIEFS: A POLLUTION NORM EXAMPLE Jorge Garcia, University of Gothenburg WELFARE IMPLICATIONS OF PEER PUNISHMENT IN UNEQUAL SOCIETIES Martine Visser, Department of Economics, Gothenburg University ALL THAT IS NOT GIVEN IS LOST: SOCIAL BENEFITS IN THE COMMONS Nuria Oses-Eraso, Universidad Publica de Navarra Co-Author(s): Montserrat Viladrich-Grau, Universitat de Lleida LEGITIMACY, LOCAL PARTICIPATION, AND COMPLIANCE IN THE GALAPAGOS MARINE RESERVE César Marcelo Viteri Mejia, Mentefactura Co-Author(s): Carlos Chavez, Department of Economics, Concepcion University, Chile.
16:15 - 18:00	5Q:ECONOMICGROWTHANDTHERoom C-1ENVIRONMENT IChairperson: Thomas Lontzek, University of Kiel
	NOTES ON ENVIRONMENTAL REGULATION AND GROWTH Anil Markandya, University of Bath Co-Author(s): Alexander Golub, Environmental Defense SAVINGS GROWTH AND THE PATH OF UTILITY Kirk Hamilton, Co-Author(s): Cees Withagen, Department of Economics, University of Tilburg and CENTER, Tilburg

ENVIRONMENT, HUMAN DEVELOPMENT AND ECONOMIC GROWTH Valeria Costantini, Department of Economics, University of Roma Tre Co-Author(s): Salvatore Monni, Department of Economics, University of Roma Tre GROWTH WITH HETEROGENEOUS CAPITAL FOR POLLUTING AND NON-POLLUTING TECHNOLOGIES Thomas Lontzek, University of Kiel Co-Author(s): Till Requate, University of Kiel **GALA DINNER** 18:30 - 20:30

18:30 - 20:30	GALA DINNER	Room Swan and
	Chairperson:	Garden

### **THURSDAY 6 JULY 2006**

08:45 - 10:30	PARALLEL SESSIONS 06
08:45 - 10:30	SYMPOSIUM       SESSION:       6A:       BIODIVERSITY:       Room C-         BIOECON NETWORK       Chairperson:       PAULO       NUNES,       FEEM and       CA         FOSCARI UNIVERSITY OF VENICE       Organizer:       PAULO       NUNES,       FEEM and       CA         UNIVERSITY OF VENICE       OF VENICE       OF VENICE       OF VENICE       OF VENICE
	ECONOMIC VALUATION OF BIODIVERSITY: A COMPARATIVE STUDY PAULO NUNES, FEEM and CA FOSCARI UNIVERSITY OF VENICE Co-Author(s): Peter Nijkamp, Free University of Amsterdam and Gabriella Vindigni, University Of Catania VALUING ANIMAL GENETIC RESOURCES: A CASE STUDY OF
	<ul> <li>CATTLE IN KENYA USING CHOICE EXPERIMENTS</li> <li>Eric Ruto, University of NewcasItle</li> <li>Co-Author(s): Guy Garrod, University of Newcastle and Riccardo</li> <li>Scarpa, University of Waikato, Economics Dpt</li> <li>USING A CHOICE EXPERIMENT TO VALUE ECONOMIC</li> <li>BENEFITS OF WETLANDS: THE CASE OF CHEIMADITIDA</li> <li>WETLAND IN GREECE</li> <li>Ekin Birol, University of Cambridge</li> <li>Co-Author(s): Katia Karousakis, University College London and</li> </ul>
	Phoebe Koundouri, Athens University of Economics and Business <b>AGRICULTURE PRODUCTION VERSUS BIODIVERSITY</b> <b>PROTECTION: WHAT ROLE FOR NORTH-SOUTH</b> <b>UNCONDITIONAL TRANSFERS?</b> Figuières Charles, Co-Author(s): Thoyer Sophie, ENSAM LAMETA and Aulong Stephanie,
	COUNTING THE COST OF VULTURE DECLINES – ECONOMIC APPRAISAL OF THE BENEFITS OF THE GYPS VULTURE IN INDIA Tim Taylor, University of Bath Co-Author(s): Kishore Kumar Dhavala, Institute of Economic Growth, Alberto Longo, Queen's University Belfast and University of Bath, Anil Markandya, University of Bath, Sucheta Murty, Institute of Economic Growth and M.N. Murty, Institute of Economic Growth
08:45 - 10:30	SYMPOSIUM SESSION: 6B: CHINA-JAPAN CDM:Room IPOTENTIAL, EVALUATION AND FINANCE TOADVANCE SUSTAINABLE DEVELOPMENTChairperson: Akihisa Mori, Kyoto UniversityOrganizer: Akihisa Mori, Kyoto University

### FINANCIAL ASPECT OF JAPAN-CHINA CDM

Akihisa Mori, Kyoto University

## SITE LOCATION OF CDM PROJECTS: AN INPUT OUTPUT ANALYSIS

Sungin Na, Hiroshima Shudo University

Co-Author(s): Kiyoshi Fujikawa, Konan University, Tadashi Hayashi, Takasaki City University of Economics, Yoshihisa Inada, Konan University, Akihisa Mori, Kyoto University, Mitsuru Shimoda, and Kazuhiro Ueta, Kyoto University and President of SEEPS

#### A CDM PROJECT OF METHANE RECOVERY FROM LIVESTOCK: A CASE STUDY IN DINGCHENG, CHANGDE CITY, HUNAN PROVINCE, PRC

Mitsuru Shimoda, TEZUKAYAMA UNIVERSITY

Co-Author(s): Kiyoshi Fujikawa, Konan University, Yoshihisa Inada, Konan University, Takasei Kusube, Ishikawa Prefectural University and Akihisa Mori, Kyoto University

# EFFICIENCY IMPROVEMENT CDM OF THE CHONGMING POWER PLANT IN SHANGHAI

Seong-hee Kim, Kyoto University

Co-Author(s): Akihisa Mori, Kyoto University, Sungin Na, Hiroshima Shudo University and Kazuhiro Ueta , Kyoto University and President of SEEPS

#### CDM, CLIMATE CHANGE POLICY AND THE SUSTAINABLE DEVELOPMENT: METHODOLOGICAL FRAMEWORK FOR EVALUATION

Tadashi Hayashi, Takasaki City University of Economics Co-Author(s): Akihisa Mori, Kyoto University, Sungin Na, Hiroshima Shudo University, Mari Nishiki, Kyoto University and Kazuhiro Ueta, Kyoto University and President of SEEPS

08:45 - 10:30	SYMPOSIUM SESSION: 6C: SPATIAL VARIATION IN BENEFITS AND COSTS FOR ENVIRONMENTAL	Room C-2
	POLICY MAKING	
	Chairperson: Wayne Gray, Clark University	
	Organizer: Wayne Gray, Clark University	

# ON SPATIAL HETEROGENEITY IN ENVIRONMENTAL COMPLIANCE COSTS

Randy Becker, U.S. Bureau of the Census

#### A SPATIAL ANALYSIS OF THE CONSEQUENCES OF THE SO2 TRADING PROGRAM

Wayne Gray, Clark University

Co-Author(s): Cynthia Morgan, U.S. Environmental Protection Agency and Ronald Shadbegian, University of Massachusetts-Dartmouth

# DELEGATION OF POWER, LOBBY FORMATION AND THE IMPLEMENTATION OF THE 1990 CLEAN AIR ACT AMENDMENTS

Antonio Bento, University of Maryland Co-Author(s): Maximilian Auffhammer, University of California,

Berkeley and Scott Lowe, UC Santa Barbara

RACE, ENVIRONMENT, AND NEIGHBORHOOD CHOICE Randall Walsh,

08:45 - 10:30	<b>6D: CARBON SEQUESTRATION</b> Chairperson: Renato Rosa, Universidade Nova de Lisboa	Room F
	THE OPTIMAL CARBON SEQUESTRATION IN AGRICULTURAL SOILS: DOES THE DYNAMICS OF THE PHYSICAL PROCESS MATTER? Lionel Ragot, University of Lille 1 Co-Author(s): Katheline Schubert, University of Paris 1	
	THE OPTIMAL SEQUESTRATION POLICY WITH A CEILING ON THE STOCK OF CARBON IN THE ATMOSPHERE Bertrand MAGNE, University of Toulouse 1 (CEA and LERNA) Co-Author(s): Gilles Lafforgue, University of Toulouse (INRA-LERNA) and Michel MOREAUX, University of Toulouse 7 (IUF, IDEI and LERNA)	)
	IMPACT OF CARBON ACCOUNTING METHODS ON OPTIMAL FOREST MANAGEMENT: AN APPLICATION TO THE PORTUGUESE EUCALYPTUS FOREST Renato Rosa, Universidade Nova de Lisboa Co-Author(s): Maria A. Cunha-e-Sá, Universidade Nova de Lisboa Faculdade de Economia	E
08:45 - 10:30	6E: CLIMATE CHANGE AND AGRICULTURE Chairperson: Wolfram Schlenker, Columbia University	Room G
	<ul> <li>ECONOMIC IMPACTS OF CLIMATE CHANGE ON ISRAEL AGRICULTURE</li> <li>Mordechai Shechter, University of Haifa</li> <li>Co-Author(s): Pedro Berliner, Jacob Blaustein Institute for Deser Research, Ben Gurion University and David Haim, Research Assistant</li> <li>THE ECONOMIC IMPACT OF CLIMATE CHANGE ON KENYAN CROP AGRICULTURE: A RICARDIAN APPROACH</li> <li>Jane Kabubo-Mariara, Department of Economics, University o Nairobi</li> <li>NONLINEAR EFFECTS OF WEATHER ON CROP YIELDS IMPLICATIONS FOR CLIMATE CHANGE</li> <li>Wolfram Schlenker, Columbia University</li> <li>Co-Author(s): Michael Roberts, Economic Research Service United States Department of Agriculture</li> </ul>	t 1 f
08:45 - 10:30	6F: COASTAL ECOSYSTEMS Chairperson: Linda Fernandez, University of California, Riverside	Room H
	THE ENVIRONMENTAL COSTS OF COASTAL RECLAMATION IN METRO CEBU, PHILIPPINES Maria Amparo Lourdes Montenegro, Department of Economics University of San Carlos Co-Author(s): Annie Diola, Marine Biology Section, Department o Biology, University of San Carlos and Elizabeth Remedio Department of Economics, University of San Carlos IDENTIFYING THE ECONOMIC DRIVERS OF LAND USE	, f

	<ul> <li>CHANGE IN MANGROVE ECOSYSTEMS: A CASE STUDY OF THE INDIAN SUNDERBANS</li> <li>Pushpm Kumar, Institute of Economic Growth</li> <li>Co-Author(s): Kanchan Chopra, Institute of Economic Growth, Delhi 110007 India and Nisar Khan,</li> <li>THE ECONOMIC VALUE OF COASTAL ECOSYSTEMS IN REDUCING TSUNAMI IMPACTS: THE CASE OF MANGROVES IN KAPUHENWALA AND WADURUPPA, SRI LANKA</li> <li>Rusyan Jill Mamiit, Joint Institute for Marine and Atmospheric Research</li> <li>Co-Author(s): Kaushalya Wijayaweera, IUCN-The World Conservation Union, Colombo Sri Lanka</li> <li>COASTAL WATERSHED MANAGEMENT ACROSS AN INTERNATIONAL BORDER IN THE TIJUANA RIVER WATERSHED</li> <li>Linda Fernandez, University of California, Riverside</li> </ul>
08:45 - 10:30	6G: COMMON-PROPERTY RESOURCES IRoom IChairperson: Timo Goeschl, University of HeidelbergRoom I
	<ul> <li>SHARING A COMMON RESOURCE WITH CONCAVE BENEFITS Stefan Ambec, INRA GAEL Grenoble</li> <li>THE ENVIRONMENTAL-INDUCED AND THE HUMAN-INDUCED SCARCITY IN THE COMMONS: DO WE REACT THE SAME?</li> <li>Montserrat Viladrich-Grau, Universitat de Lleida</li> <li>Co-Author(s): Nuria Oses-Eraso, Universidad Publica de Navarra and Frederic Udina, Universitat Pompeu Fabra</li> <li>GRAZING GAMES</li> <li>Anne-Sophie Crépin, The Beijer International institute of Ecological Economics</li> <li>Co-Author(s): Therese Lindahl, The Beijer International institute of Ecological economics</li> <li>ENDOGENOUS INFORMATION STRUCTURES IN ENVIRONMENTAL CONTRACTING</li> <li>Timo Goeschl, University of Heidelberg</li> <li>Co-Author(s): Tun LIN, Asian Development Bank</li> </ul>
08:45 - 10:30	6H: COST-BENEFIT ANALYSIS IIRoom B-1Chairperson: Ian J. Bateman, University of East Anglia
	<ul> <li>THE ECONOMIC COSTS AND BENEFITS OF INVESTMENTS IN MUNICIPAL WATER AND SANITATION INFRASTRUCTURE: A GLOBAL PERSPECTIVE</li> <li>Michael Hanemann, University of California, Berkeley</li> <li>Co-Author(s): Dale Whittington, University of North Carolina - Chapel Hill</li> <li>VALUING CULTURAL HERITAGE IN DEVELOPING COUNTRIES: COMPARING AND POOLING CONTINGENT VALUATION AND CHOICE MODELING ESTIMATES</li> <li>Tuan Tran Huu, College of Economics, Hue University, VIETNAM and Department of Economics and Resource Management, Norwegian University of Life Sciences, NORWAY</li> <li>Co-Author(s): Stale Navrud, Department of Economics and</li> </ul>

	<ul> <li>Resource Management, Norwegian University of Life Sciences</li> <li>BENEFIT TRANSFER OF DISAMENITIES' VALUES OF WASTER</li> <li>TRANSFER-STATIONS IN ISRAEL</li> <li>Tzipi Eshet, Faculty of Civil and Environmental Engineering, Technion, Haifa, ISRAEL</li> <li>Co-Author(s): Mira Baron, Faculty of Industrial Engineering &amp; Management, Technion, Haifa, ISRAEL and Mordechai Shechter, University of Haifa</li> <li>THE AGGREGATION OF ENVIRONMENTAL BENEFIT VALUES: WELFARE MEASURES, DISTANCE DECAY AND TOTAL WTP</li> <li>Ian J. Bateman, University of East Anglia</li> <li>Co-Author(s): Stavros Georgiou, DEFRA and Iain Lake, University of East Anglia</li> </ul>	
08:45 - 10:30	6I: EXPERIMENTS IN ENVIRONMENTAL ECONOMICS III Chairperson: John Rolfe, Central Queensland University	Room J
	LEXICOGRAPHIC DECISION-MAKING RULES IN DISCRETE CHOICE EXPERIMENTS: IMPLICATIONS ON INDIVIDUAL-SPECIFIC WTP ESTIMATES Danny Campbell, Institute of Agri-Food & Land Use, Queen's University Belfast Co-Author(s): George. Hutchinson, Queen's University Belfast and Riccardo Scarpa, Waikato Management School, University of Waikato (New Zealand) AND Environment Department, University of York (United Kingdom) STATUS-QUO EFFECT IN CHOICE MODELING: PROTEST BELIEFS, ATTITUDES, AND TASK COMPLEXITY Jürgen Meyerhoff, TU Berlin Co-Author(s): Ulf Liebe, Gutenberg University of Mainz THE IMPACT OF OFFERING TWO VERSUS THREE ALTERNATIVES IN CHOICE MODELLING EXPERIMENTS John Rolfe, Central Queensland University Co-Author(s): Jeff Bennett, Australian National University	
08:45 - 10:30	<b>6J: TRADABLE PERMITS I</b> Chairperson: Eva Benz, Bonn Graduate School of Economics, Germany	Room E
	<ul> <li>INCENTIVES AND QUOTA PRICES IN AN EMISSION TRADING SYSTEM WITH UPDATING</li> <li>Knut Einar Rosendahl, Statistics Norway</li> <li>INTERNATIONAL PERMIT MARKETS AND DOMESTIC EMISSIONS REGULATION</li> <li>Odd Godal, Department of Economics, Göteborg University</li> <li>MAKING MARKETS FOR DEVELOPMENT RIGHTS WORK: WHAT DETERMINES DEMAND?</li> <li>Elizabeth Kopits, U.S. EPA- Nat''I Center for Enviromental Economics</li> <li>Co-Author(s): Virginia McConnell, University of Maryland, Baltimore County, and Resources for the Future and Margaret</li> </ul>	

	Walls, Resources for the Future <b>SPECIFYING AND PRICING A NEW CLASS OF ASSETS: CO2</b> <b>EMISSION ALLOWANCES</b> Eva Benz, Bonn Graduate School of Economics, Germany Co-Author(s): Stefan Trueck, Queensland University of Technology
08:45 - 10:30	<b>6K: VOLUNTARY POLLUTION ABATEMENT II</b> Room 510 Chairperson: Wilma Rose Q Anton, University of Central Florida
	<ul> <li>THE EFFECTS OF VOLUNTARY ACTION PLAN ON ENERGY SAVING INVESTMENT</li> <li>Makoto Sugino, Sophia University, Graduate School of Economics Co-Author(s): Toshi Arimura, Sophia University</li> <li>PARTICIPATION IN ENVIRONMENTAL ORGANIZATIONS: AN EMPIRICAL ANALYSIS</li> <li>Maria A. Garcia-valinas, UNIVERSITY OF OVIEDO Co-Author(s): Benno Torgler, Yale University</li> <li>CAN VOLUNTARY POLLUTION PREVENTION PROGRAMS FULFILL THEIR PROMISES? EVIDENCE FROM THE 33/50 PROGRAM</li> <li>Neha Khanna, Binghamton University</li> <li>Co-Author(s): Martina Vidovic, Bloomsburg University</li> <li>SEEKING PROACTIVE COMPLIANCE: INCENTIVES FOR ENVIRONMENTAL AUDITS</li> <li>Wilma Rose Q Anton, University of Central Florida Co-Author(s): Donna Theresa Ramirez Harrington, University of Guelph</li> </ul>
08:45 - 10:30	6L: WATER MANAGEMENT II Room 501 Chairperson: Kristin Komives, Institute of Social Studies
	<ul> <li>HETEROGENEOUS RESPONSES TO WATER CONSERVATION PROGRAMS: THE CASE OF RESIDENTIAL USERS IN LOS ANGELES</li> <li>Celine Nauges, LERNA, University of Toulouse</li> <li>Co-Author(s): Michael Hanemann, University of California, Berkeley</li> <li>PARETO-IMPORVING WATER MANAGEMENT OVER SPACE AND TIME: THE HONOLULU CASE</li> <li>Basharat Pitafi, University of Southern Illinois, Carbondale</li> <li>Co-Author(s): Jim Roumasset, University of Hawaii at Manoa</li> <li>SOCIAL PRICING AND WATER PROVISION IN COTE D'IVOIRE</li> <li>Alban Thomas, INRA-LERNA, University of Toulouse</li> <li>Co-Author(s): Daouda DIAKITE, LERNA, University of Toulouse and Aggey Semenov, University of Toulouse and CORE</li> <li>POST-CONSTRUCTION SUPPORT ACTIVITIES AND THE SUSTAINABILITY OF RURAL WATER PROJECTS IN GHANA</li> <li>Dale Whittington, University of North Carolina - Chapel Hill</li> <li>Co-Author(s): Kristin Komives, Institute of Social Studies and Rich Thorsten, University of North Carolina-Chapel Hill</li> </ul>

08:45 - 10:30	6M: WILDLIFE CONSERVATION Room K Chairperson: Marca Weinberg, Economic Research Service, USDA
	<ul> <li>GRANDMA OR THE WOLF: A REAL OPTIONS FRAMEWORK FOR MANAGING HUMAN-WILDLIFE CONFLICTS</li> <li>Jean-Daniel Saphores,</li> <li>Co-Author(s): Baishali Bakshi, None</li> <li>CAN LOCAL COMMUNITIES IN ZIMBABWE BE TRUSTED WITH</li> <li>WILDLIFE MANAGEMENT? : EVIDENCE FROM CONTINGENT</li> <li>VALUATION OF ELEPHANTS</li> <li>Edwin Muchapondwa, University of Cape Town</li> <li>Co-Author(s): Fredrik Carlsson, Department of Economics,</li> <li>Göteborg University and Gunnar Kohlin, Department of Economics,</li> <li>Göteborg University</li> <li>SPATIAL TARGETING OF WETLAND RESTORATION FOR</li> <li>WATER QUALITY AND WILDLIFE</li> <li>Marca Weinberg, Economic Research Service, USDA</li> <li>Co-Author(s): Steve Newbold, US EPA</li> </ul>
08:45 - 10:30	6N: CLIMATE CHANGE: POLICIES IN Room 509 INDUSTRIALISED COUNTRIES Chairperson: Günter Lang, University of Augsburg
	<ul> <li>EVALUATING THE PERFORMANCE OF VOLUNTARY CO2 EMISSIONS CONTROL IN THE UNITED STATES: AN ANALYSIS OF THE CLIMATE CHALLENGE PROGRAM</li> <li>Kyoungsun HEO, Indiana University - Bloomington</li> <li>Co-Author(s): David Good, Indiana University - Bloomington and Kerry Krutilla, Indiana University - Bloomington</li> <li>CLIMATE CHANGE AGREEMENTS IN THE UK: A SUCCESSFUL POLICY EXPERIENCE?</li> <li>Gildas de Muizon, CERNA - Centre of Industrial Economics</li> <li>Co-Author(s): Matthieu Glachant, CERNA - Ecole des Mines de Paris</li> <li>PORTFOLIO ANALYSIS OF CARBON STOCKS IN JAPAN</li> <li>Hiroyasu Sugihara, Development Bank of Japan</li> <li>Co-Author(s): Yoriko Ikoma, Research Centre of Regional Policy, Development Bank of Japan, and Jun Yamashita, Affiliation:Graduate School of Social and Cultural Studies, Kyushu</li> <li>WHERE ARE GERMANY'S GAINS FROM KYOTO? ESTIMATING THE EFFECTS OF GLOBAL WARMING ON AGRICULTURE</li> <li>Günter Lang, University of Augsburg</li> </ul>
08:45 - 10:30	60: AIR POLLUTION II Room 553 Chairperson: Henrik Hammar, National Institute of Economic Research (Sweden)
	ENVIRONMENTAL EQUITY AND VULNERABILITY TO AIR POLLUTION: EVIDENCE FROM A DEVELOPING COUNTRY Vinish Kathuria, Associate Professor Co-Author(s): Nisar Khan, Sr. Research Analyst

	<ul> <li>MEASURING BENEFITS FROM REDUCED AIR POLLUTION IN THE CITIES OF DELHI AND KOLKATA IN INDIA USING HEDONIC PROPERTY PRICES MODEL* M.N. MURTY, S.C. GULATI AND AVISHEK BANERJEE</li> <li>Gulati S C, Institute of Economic Growth</li> <li>Co-Author(s): Murty M N , Institute of Economic Growth</li> <li>ECONOMIC GROWTH AND AIR QUALITY IN CHINA</li> <li>Daigee Shaw, Institute of Economics, Academia Sinica</li> <li>Co-Author(s): Wei Cen, Jin He Economic Research Center, XiAn JiaoTong University, Ming-Feng Hung, Department of Industrial Economics, Tamkang University and Arwin Pang,</li> <li>DETERMINANTS OF FIRMS INVESTMENTS FOR REDUCING EMISSIONS TO AIR IN THE SWEDISH PULP- AND PAPER, AND ENERGY AND HEATING INDUSTRY</li> <li>Henrik Hammar, National Institute of Economic Research (Sweden)</li> <li>Co-Author(s): Asa Lofgren, Dept. of Economics, Goteborg University</li> </ul>
08:45 - 10:30	6P: NON-POINT-SOURCE POLLUTIONRoom 554Chairperson: Christopher Burkart, Iowa State University
	<ul> <li>THE EUROPEAN WATER FRAMEWORK DIRECTIVE AND PROGRAMMES OF COST-EFFECTIVE MEASURES – AN APPLICATION</li> <li>Franz Sinabell, Austrian Institute of Economic Research Co-Author(s): Erwin Schmid, University of Natural Resources and Applied Life Sciences, Vienna</li> <li>POLICY RESEARCH ON AGRICULTURAL NON-POINT SOURCE WATER POLLUTION CONTROL IN DIANCHI LAKE AREA OF CHINA</li> <li>Yingna Huang, Research Center of Environmental Engineering and Management, Graduate school of Shenzhen, Tsinghua University</li> <li>WATER QUALITY SIMULATIONS FOR NONPOINT SOURCE POLLUTION POLICY</li> <li>Christopher Burkart, Iowa State University</li> </ul>
08:45 - 10:30	6Q:INTERNATIONALENVIRONMENTALRoom B-2AGREEMENTS IChairperson:Nathan Rive, Center for InternationalClimate and Environmental Research - Oslo
	A COOPERATIVE GAMETHEORETIC APPROACH IN KYOTO PROTOCOL Gahyeong Hur, KOICA A DYNAMIC APPROACH TO INTERNATIONAL ENVIRONMENTAL AGREEMENTS BETWEEN HETEROGENEOUS COUNTRIES Norma Olaizola, University of the Basque Country Co-Author(s): Jeroen Kuipers, Maastricht University COMPARISON OF NEGOTIATED UNIFORM VERSUS DIFFERENTIATED ABATEMENT STANDARDS FOR A TRANSBOUNDARY POLLUTION PROBLEM

Jean-François Jacques, EURISCO Université Paris-Dauphine Co-Author(s): Basak Bayramoglu, PSE and CES Université Paris 1

#### CLIMATE AGREEMENTS BASED ON RESPONSIBILITY FOR GLOBAL WARMING: PERIODIC UPDATING, POLICY CHOICES, AND REGIONAL COSTS

Nathan Rive, Center for International Climate and Environmental Research - Oslo

Co-Author(s): Jan S. Fuglestvedt, Center for International Climate and Environmental Research - Oslo and Asbjørn Torvanger, Center for International Climate and Environmental Research - Oslo

#### 10:30 - 11:00 **COFFEE BREAK**

#### 11:00 - 12:30 **PLENARY SESSION**

11:00 - 12:30	PLENARY 3: ECONOMICS OF BIODIVERSITY CONSERVATION Chairperson: Irina Glazyrina, Institute of Natural Resources of the Russian Academy of Sciences and Past President of the Russian Society of Ecological Economics	Room Main Hall
	ECONOMICS OF BIODIVERSITY CONSERVATION Stephen Polasky, University of Minnesota	
12:30 - 14:00	LUNCH	
12:30 - 14:00	AERE GENERAL ASSEMBLY: THE PRESENTATION O PRIZE FOR THE BEST PAPER ON THE ECONOMICS CHANGE IN THE PAST THREE YEARS	
12:30 - 14:00	AERE GENERAL ASSEMBLY: THE PRESENTATION OF THE PETRY PRIZE FOR THE BEST PAPER ON THE ECONOMICS OF CLIMATE CHANGE IN THE PAST THREE YEARS Chairperson: Richard T. Carson, University of California San Diego and President of AERE	Room D
14:00 - 15:45	PARALLEL SESSIONS 07	
14:00 - 15:45	SYMPOSIUM SESSION: 7A: DAVID PEARCE	Room B-1

#### COMMEMORATIVE SESSION

Chairperson: Edward Barbier, University of Wyoming Organizer: Edward Barbier, University of Wyoming

DAVIDPEARCE'SWORKINENVIRONMENTALANDDEVELOPMENTAnil Markandya, FEEMDAVID PEARCE'S CONTRIBUTIONS TO THE WORLD BANKKirk Hamilton,HOW TO INFLUENCE ENVIRONMENTAL POLICY – LESSONSFROM DAVID W. PEARCEFrank Convery,

 14:00 - 15:45
 SYMPOSIUM SESSION: 7B: ENVIRONMENTAL QUALITY AND HEALTH: ASSESSING INCENTIVES, COSTS AND BENEFITS Chairperson: E. Somanathan, Indian Statistical Institute, Delhi Organizer: Priya Shyamsundar, and E. Somanathan, Indian Statistical Institute, Delhi
 Room C-1

# AWARENESS AND THE DEMAND FOR ENVIRONMENTAL QUALITY

E. Somanathan, Indian Statistical Institute, Delhi

PESTICIDES OR "HEALTHICIDES"? AN ATTEMPT AT ESTIMATING THE HEALTH COSTS OF PESTICIDE APPLICATORS Indira Devi, Kerala Agricultural University

**DEMAND FOR ENVIRONMENTAL QUALITY: A CASE OF INDOOR AIR QUALITY DEMAND IN RURAL NEPAL** Krishna Prasad Pant, Ministry of Agriculture and Cooperatives

Co-Author(s): Subhrendu Pattanayak, RTI International

# VALUATION OF URBAN AIR POLLUTION: A CASE STUDY OF KANPUR CITY IN INDIA

Usha Gupta, Institute of Economic Growth

MANAGING THE ARSENIC DISASTER IN WATER SUPPLY – RISK MEASUREMENT, COSTS OF ILLNESS AND POLICY CHOICES FOR BANGLADESH

A.K. Enamul Haque, Co-Author(s): Zakir Hussain Khan,

### 14:00 - 15:45 SYMPOSIUM SESSION: 7C: POLICY INNOVATIONS IN ENVIRONMENTAL MANAGEMENT Chairperson: Catherine S. Norman, The Johns Hopkins University Organizer: Catherine S. Norman, The Johns Hopkins University Room C-2

#### MANDATORY INFORMATION DISCLOSURE AND ENVIRONMENTAL PERFORMANCE IN THE ELECTRICITY INDUSTRY

Jay Shimshack, Tufts University Co-Author(s): Magali Delmas, Bren School, UCSB and Maria

	Montes, Universitat Pompeu Fabra LIMITED TENURE AND EFFICIENT RESOURCE USE Christopher Costello, Bren School of Environmental Science & Management, UCSB Co-Author(s): Daniel Kaffine, Bren School, UCSB ANTI-SLAPP LEGISLATION AND CITIZEN ENFORCEMENT MEASURING THE "CHILL" OF STRATEGIC LAWSUITS Bevin Ashenmiller, Co-Author(s): Catherine S. Norman, The Johns Hopkins University	:
14:00 - 15:45	<b>7D: BIOECONOMICS I</b> Chairperson: Noailly Joelle, CPB Netherlands Bureau for Economic Policy Analysis	Room F
	<ul> <li>BIOECONOMETRICS: EMPIRICAL MODELING OF BIOECONOMIC SYSTEMS</li> <li>Martin D Smith, Duke University</li> <li>HARVESTING IN AN INTEGRATED GENERAL EQUILIBRIUM MODEL</li> <li>Thomas Eichner, University of Siegen</li> <li>Co-Author(s): Rüdiger Pethig, University of Siegen</li> <li>FISHERIES MANAGEMENT IN THE GALAPAGOS MARINE RESERVE: A BIOECONOMIC PERSPECTIVE</li> <li>César Marcelo Viteri Mejia, Mentefactura</li> <li>Co-Author(s): Jon Conrad, Applied Economics and Managemen</li> <li>Cornell University, Franklin Henrik, IBD, Linda Nøstbakken</li> <li>Cornell and Stone Steven, IBD</li> <li>COEVOLUTION OF ECONOMIC AND ECOLOGICAL SYSTEMS AN APPLICATION TO AGRICULTURAL PESTICIDE RESISTANCE</li> <li>Noailly Joelle, CPB Netherlands Bureau for Economic Policy Analysis</li> </ul>	1 : : :
14:00 - 15:45	<ul> <li>7E: BIODIVERSITY: CASE STUDIES         Chairperson: Heidi J. Albers, Oregon State University     </li> <li>OPTIMALLY MANAGING A PROTECTED AREA HOSTING NON-CHARISMATIC SPECIES         Birgit Friedl, Department of Economics, University of Graz         Co-Author(s): Doris Behrens, Department of Economics, University of Klagenfurt and Michael Getzner, Dept of Econ, University of Klagenfurt     </li> <li>VOLUNTARY CONSERVATION IN WORKING LANDSCAPES         Juha Siikamaki, Resources for the Future         Co-Author(s): David Layton, University of Washington     </li> <li>MAINTENANCE COSTS, PRICE UNCERTAINTY, AND ABANDONMENT IN SHADE-GROWN COFFEE PRODUCTION COASTAL OAXACA, MEXICO         Heidi J. Albers, Oregon State University         Co-Author(s): Beatriz Avalos Sartorio, Science Council of CGIAR         Michael Batz, Resources for the Future and Allen Blackman Resources for the Future     </li> </ul>	/ f ) :

14:00 - 15:45	7F: CHOICE MODELS IN ENVIRONMENTALRoom HECONOMICSRoom Spanish NationalChairperson: Alejandro Caparros, Spanish NationalReseach Council
	<b>TESTING FOR RANDOM UTILITY MAXIMIZATION</b> J S Shonkwiler, University of Nevada
	HICKSIAN WELFARE MEASURES IN RANDOM UTILITY MODEL WITH LINEAR AND NON-LINEAR INCOME EFFECTS: A COMPARATIVE EVALUATION BASED ON CONJOINT CHOICE-BASED SURVEY DATA Sudip Chattophadyay, San Francisco State University
	Co-Author(s): Edward R. Morey, <b>APPLICATION OF CHOICE MODELLING TO ENVIRONMENTAL</b> <b>MITIGATION</b> Basil Sharp, Unversity of Auckland Co-Author(s): Geoffrey Kerr, Lincoln University
	COMPARING STRUCTURAL MODELS AND WELFARE MEASURES IN RANKING AND CHOICE EXPERIMENTS Alejandro Caparros, Spanish National Research Council Co-Author(s): Pablo Campos, Spanish National Research Council and Jose Luis Oviedo, Spanish National Research Council
14:00 - 15:45	7G: CLIMATE CHANGE AND INNOVATIONRoom B-2Chairperson:CathrineHagem,DepartmentDepartmentofEconomics,University of Oslo
	CLIMATE POLICY, PRUDENCE, AND THE ROLE OF TECHNOLOGICAL INNOVATION Thomas Sterner, University of Göteborg Co-Author(s): Carolyn Fischer, Resources for the Future THE FUTURE OF GLOBAL WARMING: WILL IT BE POLLUTION ELIMINATING TECHNOLOGY OR ENVIRONMENTAL CATASTROPHE? Ram Ranjan, University of Florida A MODEL OF THE EFFECTS OF UNCERTAINTY UPON TECHNOLOGICAL INNOVATION IN THE CONTEXT OF CLIMATE CHANGE Alexander Golub, Environmental Defense Co-Author(s): Dan Dudek, and Elena Strukova, CLEAN DEVELOPMENT MECHANISM (CDM) AND TECHNOLOGICAL CHANGE. Cathrine Hagem, Department of Economics, University of Oslo
14:00 - 15:45	<b>7H: COMMON-PROPERTY RESOURCES II</b> Room IChairperson: Shunji Oniki, JIRCAS
	A FRAMED FIELD EXPERIMENT ON COLLECTIVE ENFORCEMENT MECHANISMS WITH ETHIOPIAN FARMERS Till Requate, University of Kiel Co-Author(s): Anke Rojahn,

	COOPERATION AND CONSERVATION IN THE MANAGEMENT OF COMMON PROPERTY RESOURCES: THE CASE OF IRISH COMMONAGE Tom van Rensburg, National University of Ireland, Galway Co-Author(s): Salvatore Di Falco, CSERGE- University of East Anglia, UK OVERGRAZING, POPULATION PRESSURE AND EFFICIENCIES OF PASTORAL MANAGEMENT IN INNER MONGOLIA AND MONGOLIA Shunji Oniki, JIRCAS
14:00 - 15:45	7I: CONTAMINATED SITES AND HAZARDOUSRoomWASTEChairperson: Eva Samakovlis, National Institute of Economic Research
	<ul> <li>PAYING FOR PERMANENCE: PUBLIC PREFERENCES FOR CONTAMINATED SITE CLEANUP</li> <li>Anna Alberini, AREC, University of Maryland and FEEM, Venice</li> <li>Co-Author(s): Aline Chiabai, Fondazione Eni Enrico Mattei, Stefania Tonin, University of VEnice-IUAV and Margherita Turvani, University of Venice-IUAV</li> <li>THE ECONOMIC IMPACT OF CONTAMINATED AND NOXIOUS SITES: A META ANALYSIS</li> <li>Doohwan Won, University of Illinois at Urban-Champaign</li> <li>Co-Author(s): John Braden, University of Illinois and Laura Taylor, Georgia State University</li> <li>MATTERS RISK? THE ALLOCATION OF GOVERNMENT SUBSIDIES FOR REMEDIATION OF CONTAMINATED SITES UNDER THE SWEDISH LOCAL INVESTMENT PROGRAMME</li> <li>Eva Samakovlis, National Institute of Economic Research Co-Author(s): Johanna Forslund, National Institute of Economic, Research and Maria Vredin Johansson, Department of Economics, Uppsala University</li> </ul>
14:00 - 15:45	7J: COST-BENEFIT ANALYSIS IIIRoomChairperson: Yoshifumi Konishi, University of MinnesotaRoom
	ON THE EVALUATION OF AN ENVIRONMENTALLY DAMAGING PROJECT Biswo Poudel, University of California THE ROLE OF HETEROGENEOUS CONSUMER PREFERENCES IN DRIVING THE SPEED OF ABATEMENT Maria Damon, University of California, San Diego VALUE OF INFORMATION AND AVERTING EXPENDITURES: THE CASE OF TOXIC WATER CONTAMINATION Yoshifumi Konishi, University of Minnesota Co-Author(s): Jay Coggins, University of Minnesota
14:00 - 15:45	7K: ECO-LABELLING       Room         Chairperson: Wilhelm Althammer, Leipzig Graduate       School of Management

	HARMONIZATION VERSUS MUTUAL RECOGNITION OF NATIONAL ECO-LABELS Ville Mälkönen, VATT, Finland
	TRADE BANS VERSUS ECO-LABELING IN THE CASE OF GMOS: CONSUMERISM OR PROTECTIONISM? Mads Greaker, Research Department Statistics Norway Co-Author(s): Yuyu Chen,
	DETERMINANTS OF PARTICIPATION VERSUS CONSUMPTION IN THE NORDIC SWAN ECO-LABELED MARKET
	Keith Brouhle, Grinnell College Co-Author(s): Madhu Khanna, University of Illinois at Urbana-Champaign ECOLOGICAL LABELING IN NORTH-SOUTH TRADE
	Wilhelm Althammer, Leipzig Graduate School of Management Co-Author(s): Susanne Droege, DIW Berlin
14:00 - 15:45	7L: ECONOMIC GROWTH AND THE ENVIRONMENT Room 510
	Chairperson: Simone Valente, ETH Zurich
	ENERGY PRICES, GROWTH, AND THE CHANNELS IN BETWEEN: THEORY AND EVIDENCE Lucas Bretschger, ETH Zürich
	OPTIMAL GROWTH IN OVERLAPPING GENERATIONS WITH A
	DIRECTLY POLLUTING SECTOR AND AN INDIRECT ONE. Gilles Rotillon, Université Paris X Nanterre
	GENUINE DISSAVING AND OPTIMAL GROWTH Simone Valente, ETH Zurich
14:00 - 15:45	7M:EXPERIMENTSINENVIRONMENTALRoom 501ECONOMICS IVChairperson: Yohei Mitani, Waseda University
	WTP CALIBRATION AND BIAS TRANSFER: A STOCHASTIC
	FRONTIER APPROACH Dieldre Harder, Resources, Economic and Environmental Centre
	for Studies, Inc (REECS)
	Co-Author(s): Herminia Francisco, Economy and Environment Program for Southeast Asia (EEPSEA), Jianjun Jin, PhD student,
	University of Macau and Asa Sajise, faculty, Department of economics, University of the Philippines at Los banos (UPLB)
	A "CHOICE EXPERIMENT" EXPERIMENT
	Katherine Carson, US Air Force Academy
	•
	Co-Author(s): Susan Chilton, University of Newcastle and George. Hutchinson, Queen's University Belfast
	Co-Author(s): Susan Chilton, University of Newcastle and George.
	Co-Author(s): Susan Chilton, University of Newcastle and George. Hutchinson, Queen's University Belfast WHAT FACTORS ARE RESPONSIBLE FOR DECISION MAKING IN A THRESHOLD ENVIRONMENTAL GOODS EXPERIMENT: A CONSIDERATION OF HYPOTHETICAL BIAS IN STATED
	Co-Author(s): Susan Chilton, University of Newcastle and George. Hutchinson, Queen's University Belfast WHAT FACTORS ARE RESPONSIBLE FOR DECISION MAKING IN A THRESHOLD ENVIRONMENTAL GOODS EXPERIMENT: A

14:00 - 15:45	<b>7N: THEORY OF ENVIRONMENTAL POLICY II</b> Room KChairperson:FrancescoRicci,UniversitédeCergy-Pontoise (THEMA) and LERNACergy-PontoiseCergy-PontoiseCergy-Pontoise
	EXCESSIVE SPENDING TO AVOID ENVIRONMENTAL ACCIDENTS: IS IT A CONCERN IN PRACTICE? Klaas van 't Veld, University of Wyoming Co-Author(s): Emma Hutchinson, University of Victoria HOW LONG SHOULD A PIPE SMOKE? AN OPTION VALUE
	APPROACH FOR ABATEMENT TECHNOLOGY Andreas von Döllen, University of Kiel Co-Author(s): Till Requate, University of Kiel
	GETTING POLLUTERS TO TELL THE TRUTH Marcelo Caffera, University of Montevideo Co-Author(s): Juan Dubra, University of Montevideo
	OVERCOMING THE NATURAL RESOURCE CONSTRAINT THROUGH DEDICATED R¥&D EFFORT WITH HETEROGENOUS LABOR SUPPLY
	Francesco Ricci, Université de Cergy-Pontoise (THEMA) and LERNA Co-Author(s): Jean-Pierre Amigues, LERNA - Université de Toulouse 1 and INRA and Michel Moreaux, Université de Toulouse 1 (IUF, IDEI and LERNA)
14:00 - 15:45	<b>70: URBAN TRANSPORT</b> Room 509Chairperson: Colin Vance, Rheinisch-WestfälischesInstitut für Wirtschaftsforschung e.V. (RWI-Essen)
	THE IMPACT OF BUS PRIORITY MEASURES ON RESIDENTS IN A BUS CATCHMENT AREA: A CASE STUDY OF A DUBLIN QUALITY BUS CORRIDOR. Simon McDonnell, University College Dublin Co-Author(s): Frank Convery, and Susana Ferreira, University
	College Dublin THE INFLUENCE OF ENVIRONMENTAL DETERIORATION AND NETWORK IMPROVEMENT ON TRANSPORT MODAL CHOICE Yusuke Sakata, Department of Economics, Kinki University Co-Author(s): Yoshizo Hashimoto, Osaka School of International Public Policy, Osaka University and Junyi Shen, Osaka School of International Public Policy, Osaka University
	BENCHMARKING SUSTAINABLE URBAN TRAVEL POLICIES: THE CASE OF BICYCLING IN GERMANY Rave Tilmann, ifo Institute for Economic Research
	IS THERE A LINK BETWEEN URBAN FORM AND AUTOMOBILE USE IN GERMANY? EVIDENCE FROM A SELECTIVITY MODEL
	Colin Vance, Rheinisch-Westfälisches Institut für Wirtschaftsforschung e.V. (RWI-Essen) Co-Author(s): Ralf Hedel, German Aerospace Center (DLR)
14:00 - 15:45	7P: DRINKING WATER Room 553

Chairperson: Christophe Bontemps, University of

Toulouse - INRA

	<ul> <li>A LITTLE KNOWLEDGE: HOUSEHOLD WATER QUALITY INVESTMENT IN THE ANNAPOLIS VALLEY, NOVA SCOTIA, CANADA</li> <li>Johannus (John) Janmaat, Acadia University</li> <li>ESTIMATION OF NON-TAP WATER DEMAND IN CENTRAL AMERICAN CITIES</li> <li>Celine Nauges, LERNA, University of Toulouse</li> <li>Co-Author(s): Jon Strand, International Monetary Fund</li> <li>LOCAL MARKETS FOR PAYMENTS FOR ENVIRONMENTAL SERVICES: DIRECT PAYMENT FOR WATERSHED SERVICES IN EASTERN COSTA RICA</li> <li>Michael Kaplowitz, Michigan State University</li> <li>Co-Author(s): Oscar Arreola, and Frank Lupi, Michigan State University</li> <li>TO DRINK OR NOT TO DRINK (TAP WATER) ? THE IMPACT OF ENVIRONMENTAL QUALITY ON CONSUMER'S CHOICES</li> <li>Christophe Bontemps, University of Toulouse - INRA</li> <li>Co-Author(s): Celine Nauges, LERNA, University of Toulouse</li> </ul>
14:00 - 15:45	7Q: GREEN PROTECTIONISMRoom 554Chairperson: Carol McAusland, University of Maryland
	ON THE SALE OF DISGUISED PROTECTIONISM Michael Margolis, Universidad de Guanajuato Co-Author(s): Jason Shogren, University of Wyoming BLACK MARKETS AND TRADE BANS: CAN BANS REDUCE ILLEGAL PRODUCTION ? Ayumi Onuma, Keio University CAN R&D INDUCING GREEN TARIFFS REPLACE INTERNATIONAL ENVIRONMENTAL REGULATIONS? Alireza Naghavi, University of Modena and Reggio Emilia REGULATORY TAKINGS AND ENVIRONMENTAL REGULATION IN NAFTA'S CHAPTER 11 Carol McAusland, University of Maryland Co-Author(s): Emma Aisbett, University of California at Berkeley and Larry Karp, University of California at Berkeley
15:45 - 16:15	COFFEE BREAK
16:15 - 18:00	PARALLEL SESSIONS 08
16:15 - 18:00	SYMPOSIUM SESSION: 8A: ADVANCES IN STATEDRoom B-1PREFERENCE METHODOLOGYChairperson: William Wheeler, Organizer: William Wheeler,

	AN EXPERIMENTAL INVESTIGATION OF THE DETERMINANTS OF INADEQUATE SCOPE SENSITIVITY FOR RISE REDUCTIONS IN STATED PREFERENCE STUDIES Katharine Bolt, Co-Author(s): Ian J. Bateman, University of East Anglia, Brett Day Centre for Social and Economic Research on the Globa Environment and Graham Loomes, University of East Anglia	,
16:15 - 18:00	8B: TRADE AND THE ENVIRONMENT IFChairperson: Sonia Ben Kheder, University Paris 1	Room C-2
	DIVERSITY IN ENVIRONMENTAL STANDARDS AND COMPETITIVENESS: A TEMPORAL AND CROSS-COUNTRY STUDY OF GLOBAL LEATHER INDUSTRY SUPPLY CHAIN Sankar Ulaganathan, Madras University and Anna University IT'S THE ENVIRONMENT, STUPIDI: TO WHAT EXTENT CAN WTO TRADE REFORM LEAD TO ENVIRONMENTAL RATHER THAN ECONOMIC IMPACTS? Trevor Donnellan, Teagasc - Irish Agriculture and Food Development Authority Co-Author(s): Kevin Hanrahan, Teagasc - Irish Agriculture and Food Devlopment Authority	
	FOREIGN DIRECT INVESTMENT AND ENVIRONMENTAL REGULATION: A PANEL-DATA COMPARATIVE ANALYSIS Sonia Ben Kheder, University Paris 1	-
16:15 - 18:00	8C: VALUATION OF HEALTH Chairperson: Kevin Haninger, Harvard University	Room F
	INTEGRATING RISK PERCEPTIONS INTO A SELF-PROTECTIVE RESIDENTIAL LOCATION CHOICE MODEL TO VALUE HEALTH RISKS FROM WASTE INCINERATORS Young Sook Eom, Dept. of Economics, Chonbuk Nationa University Co-Author(s): Douglas M. Larson, American Environmenta Economicd Assoication WILLINGNESS TO PAY TO REDUCE COMMUNITY HEALTH RISKS FROM MUNICIPAL DRINKING WATER: A STATED PREFERENCE STUDY Vic Adamowicz, University of Alberta Co-Author(s): Diane Dupont, Brock University and Alan Krupnick Resources for the Future HEALTH AND ECONOMIC ASSESSMENT OF AIR POLLUTION IN DHAKA, BANGLADESH Md. Murshid Aktar, Government Edward College Co-Author(s): Koji Shimada, Ritsumeikan University WILLINGNESS TO PAY FOR QUALITY-ADJUSTED LIFE YEARS: EMPIRICAL INCONSISTENCY BETWEEN COST-EFFECTIVENESS ANALYSIS AND ECONOMIC WELFARE THEORY Kevin Haninger, Harvard University Co-Author(s): James K. Hammitt, Harvard University	- -                 

SOME EFFECTS OF DEPOSIT-REFUND SYSTEM ON PRODUCERS AND CONSUMERS Takashi Saito, Global Security Research Institute, Keio University Co-Author(s): Ayumi Onuma, Keio University WASTING INNOVATION: BARRIERS TO ENTRY AND EUROPEAN REGULATION ON WASTE ELECTRONIC EQUIPMENT Grischa Perino, University of Heidelberg Co-Author(s): Dario Mock, University of Freiburg NORMATIVE AND DESCRIPTIVE ANALYSIS OF THE SUBSTANCE FLOW: A CASE STUDY OF LEAD Rintaro Yamaguchi, Nomura Research Institute Co-Author(s): Kazuhiro Ueta, Kyoto University and President of SEEPS A KUZNETS CURVE FOR RECYCLING Karen Pittel, ETH Zürich **8E: WATER QUALITY VALUATION** 16:15 - 18:00 Room G Chairperson: Shihomi Ara, The Ohio State University WATER QUALITY VALUATION: AN EMPIRICAL EVIDENCE FROM CV SURVEYS IN THE CZECH REPUBLIC AND POLAND Mikolaj CZAJKOWSKI, Warsaw University Department of **Economic Sciences** Co-Author(s): Anna Bartczak, Warsaw University, Olimpia MARKIEWICZ, Warsaw University Department of Economic Sciences, Agnieszka MARKOWSKA, Warsaw University Department of Economic Sciences, Jan Melichar, Charles University Environment Center, Milan Scasny, Charles University Environmental Center and Hana Skopkova, Charles University **Environment Cenetr** VALUING SURFACE WATER QUALITY IN CALIFORNIA: A MIXED PANEL LOGIT MODEL USING A 21/2-BOUNDED CVM Juha Siikamaki, Resources for the Future Co-Author(s): Douglas Larson, Department of Agricultural and Resource Economics, University of California, Davis VALUING WATER QUALITY IMPROVEMENTS USING META-ANALYSIS: IS THE GLASS HALF-FULL OR HALF-EMPTY FOR NATIONAL POLICY ANALYSIS? George Van Houtven, RTI International Co-Author(s): Subhrendu Pattanayak, RTI International and John Powers, USEPA MEASURING THE EFFECTS OF LAKE ERIE WATER QUALITY IN SPATIAL HEDONIC PRICE MODELS Shihomi Ara. The Ohio State University Co-Author(s): Timothy Haab, Department of Agricultural, Environmental and Development Economics, The Ohio State University and Elena Irwin, Department of Agricultural, Environmental and Devleopment Economics, The Ohio State

	University
16:15 - 18:00	<b>8F: AGRICULTURE AND THE ENVIRONMENT:</b> Room H <b>THEORY</b> Chairperson: Jussi Lankoski, OECD
	AGRICULTURE AND HABITAT CONSERVATION: A DYNAMIC BIOECONOMIC MODEL OF AGRICULTURAL EFFORT AND LAND USE DETERMINATION Sébastien Foudi, LERNA, University of TOulouse GREEN AUCTION WITH JOINT ENVIRONMENTAL BENEFITS Andrea Cattaneo, OECD Co-Author(s): Jussi Lankoski, OECD and Markku Ollikainen, University of Helsinki LANDOWNERS' PARTICIPATION IN VOLUNTARY CONSERVATION PROGRAMS: THE IMPACT OF INFORMATION. Manuel Frondel, Rheinisch-Westfälisches Institut für Wirtschaftsforschung Co-Author(s): Frank Wätzold, THE IMPACTS OF AGRI-ENVIRONMENTAL POLICIES ON LAND ALLOCATION AND LAND PRICES Jussi Lankoski, OECD Co-Author(s): Herve Guyomard, INRA and Markku Ollikainen, University of Helsinki
16:15 - 18:00	<b>8G: BIOECONOMICS II</b> Room I Chairperson: Jeffrey Vincent, University of California-San Diego
	<ul> <li>PRICING THE ECOSYSTEM AND TAXING ECOSYSTEM SERVICES: A GENERAL EQUILIBRIUM APPROACH</li> <li>Rüdiger Pethig, University of Siegen</li> <li>Co-Author(s): Thomas Eichner, University of Siegen</li> <li>ADAPTIVE HARVESTING IN A MULTIPLE SPECIES, MULTIPLE</li> <li>USE CORAL REEF FOOD WEB</li> <li>Daniel Kramer, Michigan State University</li> <li>ECONOMIC ANALYSIS OF THE SLOSS DEBATE: AN APPLICATION TO MARINE RESERVES</li> <li>Mette Termansen, Sustainability Research Institute</li> <li>Co-Author(s): Alberto Ansuategi, (b) Departamento de Fundamentos del Análisis Económico I</li> <li>HARVEST AND EXTINCTION IN MULTI-SPECIES COMMUNITIES</li> <li>Matthew Potts, University of Miami and Jeffrey Vincent, University of California-San Diego</li> </ul>
16:15 - 18:00	8H:CLIMATECHANGE,FORESTRY,ANDRoom JAGRICULTUREChairperson:Iddo Kan,University of Haifa

### IMPLICATIONS OF CLIMATE CHANGE FOR FARMLAND

	<ul> <li>VALUE: PRELIMINARY ESTIMATES FOR CALIFORNIA</li> <li>Anthony Fisher, UC Berkeley</li> <li>Co-Author(s): Michael Hanemann, University of California, Berkeley and Wolfram Schlenker, Columbia University</li> <li>IMPLICATIONS OF A MARKET FOR CARBON ON TIMBER AND NON-TIMBER VALUES IN AN UNCERTAIN WORLD.</li> <li>Geoffrey R. McCarney, University of Alberta</li> <li>Co-Author(s): Vic Adamowicz, University of Alberta and Glen W.</li> <li>Armstrong, University of Alberta</li> <li>ECONOMIC ANALYSIS OF CLIMATE-CHANGE IMPACTS ON AGRICULTURAL PROFITABILITY AND LAND USE: THE CASE OF ISRAEL</li> <li>Iddo Kan, University of Haifa</li> <li>Co-Author(s): Mickey Rappaprot-Rom, University of Haifa and Mordechai Shechter, University of Haifa</li> </ul>
16:15 - 18:00	8I: COALITION FORMATION AND INTERNATIONALRoom B-2ENVIRONMENTAL AGREEMENTSChairperson:MiyukiNagashima,WageningenUniversity, Osaka UniversityVageningenVageningenVageningen
	<ul> <li>COALITION FORMATION AND STRATEGIC PERMIT TRADE UNDER THE KYOTO PROTOCOL</li> <li>Odd Godal, Department of Economics, Göteborg University Co-Author(s): Frode Meland, Department of Economics, University of Bergen</li> <li>COALITION FORMATION IN HIGH SEAS FISHERIES: A PARTITION FUNCTION APPROACH</li> <li>Pedro Pintassilgo, University of Algarve - Fac. of Economics</li> <li>DO ABATEMENT QUOTAS LEAD TO MORE SUCCESSFUL CLIMATE COALITIONS?</li> <li>Juan-Carlos Altamirano-Cabrera, Wageningen University Co-Author(s): Rob Dellink, Wageningen University and Michael Finus, University of Hagen</li> <li>DYNAMIC TRANSFER SCHEMES AND STABILITY OF INTERNATIONAL CLIMATE COALITIONS</li> <li>Miyuki Nagashima, Wageningen University, Osaka University Co-Author(s): Rob Dellink, Wageningen University and Ekko van lerland, Wageningen University</li> </ul>
16:15 - 18:00	<b>8J: GREEN NATIONAL ACCOUNTING</b> Room 501 Chairperson: Karl-Gustav Löfgren, University of Umeå
	<ul> <li>ENVIRONMENT DURING GROWTH: ACCOUNTING FOR GOVERNANCE AND VULNERABILITY</li> <li>Susmita Dasgupta, World Bank</li> <li>Co-Author(s): Kirk Hamilton, , Kiran Pandey, Global Environment Facility and David Wheeler, WorldBank</li> <li>COMPREHENSIVE WEALTH AND FUTURE CONSUMPTION</li> <li>Susana Ferreira, University College Dublin</li> <li>Co-Author(s): Kirk Hamilton, and Jeffrey Vincent, University of California-San Diego</li> </ul>

# EVALUATING FUTURE SUSTAINABILITY: FLOW AND STOCK OF THE EARTH FS CAPITAL ASSETS

Takanobu Kosugi, Ritsumeikan University Co-Author(s): Norihiro Itsubo, National Institute of Advanced Industrial Science and Technology (AIST), Atsushi Kurosawa, The Institute of Applied Energy, Masaji Sakagami, Nihon Fukushi University, Koji Tokimatsu, National Institute of Advanced Industrial Science and Technology (AIST) and Hiroshi Yagita, National Institute of Advanced Industrial Science and Technology (AIST) MONEY METRICS WELFARE MEASURES IN IMPERFECT MARKETS UNDER GROWTH Karl-Gustav Löfgren, University of Umeå Co-Author(s): Chuan-Zhong Li, Uppsala University 16:15 - 18:00 **8K: ROAD TRANSPORT** Room 509 Chairperson: James Kahn, Washington and Lee University and Universidade Federal do Amazonas A MULTICOUNTRY ANALYSIS OF THE CONSISTANCY OF **BENEFIT TRANSFER** Hala Abou-Ali, Cairo University Co-Author(s): Mohammed Belhaj, IVL Swedish Environmental **Research Institute Ltd** INEFFICIENCY IN COMMAND-AND-CONTROL APPROACH TOWARD ADOPTION OF LOW EMISSION VEHICLES: JAPANESE EXPERIENCE OF AIR POLLUTION FROM DIESEL TRUCKS Toshi Arimura, Sophia University Co-Author(s): Kazuyuki Iwata, Sophia University A PROPOSAL FOR STIMULATING FUEL ECONOMY OF ROAD **TRANSPORT IN INDIA** Rita Pandey, NIPFP, New Delhi, India ROAD BUILDING AND ENVIRONMENTAL PRESERVATION IN AMAZONIA: TURNING AN ENVIRONMENTAL LIABILITY INTO AN ENVIRONMENTAL ASSET James Kahn, Washington and Lee University and Universidade Federal do Amazonas 16:15 - 18:00 8L: SOCIAL NORMS AND SOCIAL RESPONSIBILITY Room E н Chairperson: Tatsuo Sugiura, NPO Minamata SOCIO-PSYCHOLOGICAL VALUE OF WORK AND THE **OPTIMALITY OF RESOURCE EXTINCTION** Hossein Farzin, University of California-Davis Co-Author(s): Ken-Ichi Akao, Waseda University SOCIAL INFLUENCE AND SUSTAINABILITY IN THE USE OF **RENEWABLE RESOURCES** Almudi Isabel, University of Zaragoza Co-Author(s): Julio Sanchez, University of Zaragoza

VOLUNTARY EMISSION REDUCTIONS, SOCIAL REWARDS, AND ENVIRONMENTAL POLICY

Michael Rauscher, Universitaet Rostock

	ENVIRONMENTAL DAMAGE AND RESTORATION IN THE MINAMATA REGION IN TERMS OF CAPABILITY Tatsuo Sugiura, NPO Minamata Co-Author(s): Fumikazu Yoshida, Hokkaido University
16:15 - 18:00	8M: FOOD SAFETY Room 510 Chairperson: Anna Alberini, AREC, University of Maryland and FEEM, Venice
	ENVIRONMENTAL IMPLICATIONS OF ORGANIC FOOD PREFERENCES: AN APPLICATION OF THE IMPURE PUBLIC GOODS MODEL ANA MARIA ALDANONDO-OCHOA, UNIVERSIDAD PUBLICA DE NAVARRA
	<b>COLLECTIVE STANDARDS, LIABILITY AND FOOD SAFETY</b> Louis Georges Soler, INRA Co-Author(s): Eric Giraud-Héraud, INRA and Hakim Hammoudi, University of Paris 2 - INRA
	WORLD FOOD NEEDS IN THE LONG RUN AND THE OPTIMAL ALLOCATIONS OF LANDS Marie-Hélène Hubert, LERNA-INRA Co-Author(s): Michel MOREAUX, University of Toulouse 1 (IUF, IDEI and LERNA)
	WAS IT SOMETHING I ATE? IMPLEMENTATION OF THE FDA SEAFOOD HACCP PROGRAM Anna Alberini, AREC, University of Maryland and FEEM, Venice Co-Author(s): Gregmar Galinato, AREC, University of Maryland, Erik Lichtenberg, AREC, University of Maryland and Dominic Mancini, US Office of Management and Budget
16:15 - 18:00	8N:       ENVIRONMENTAL       TAXES:       EMPIRICAL       Room C-1         ANALYSES         Chairperson:       Richard W. England, University of New         Hampshire,       USA
	EFFECTIVENESS OF FISCAL AND OTHER MEASURES TO MANAGE GREENHOUSE GAS EMISSIONS FROM THE AUTOMOBILE SECTOR: EVIDENCE FROM EUROPE Lisa Ryan, UCD Dublin Co-Author(s): Frank Convery, and Susana Ferreira, University College Dublin
	WHAT EXPLAIN ATTITUDE TOWARDS TAX LEVELS? A MULTI TAX COMPARISON Henrik Hammar, National Institute of Economic Research (Sweden)
	Co-Author(s): Sverker C. Jagers, Dept of Political Science, Goteborg University and Katarina Nordblom, dept of Economics, Goteborg University
	IS PRICING WATER AND TAXING FERTILIZER EFFECTIVE IN CONTROLLING THE INEFFICIENT USE OF WATER AND FERTILIZER IN CHINA? A FARMERS <sub>I</sub> <sup>-</sup> PERSPECTIVE Yongping Wei, The University of Melbourne Co-Author(s): Brian Davidson, The University of Melbourne

	MOTOR FUEL TAXATION, ENERGY CONSERVATION, AND ECONOMIC DEVELOPMENT: A REGIONAL APPROACH Richard W. England, University of New Hampshire, USA
16:15 - 18:00	<b>80: FISHERIES III</b> Room 553 Chairperson: Julio A. Peña-Torres, Dept. of Economics, Univ. Alberto Hurtado
	REGULATING A COMMON-POOL RESOURCE WHEN EXTRACTION COSTS ARE HETEROGENEOUS: FEES VERSUS QUOTAS Stefan Ambec, INRA GAEL Grenoble Co-Author(s): CARINE SEBI, INRA GAEL
	PARTICIPATION IN A LIMITED-ENTRY FISHERY: AN OPTIONS APPROACH Valentina Bosetti, FEEM Co-Author(s): David Tomberlin, NOAA
	THE IMPACT OF FISHERIES REGULATIONS ON FLEET EMPLOYMENT. AN APPLICATION TO PELAGIC FISHERIES IN CENTRAL-SOUTHERN CHILE Jorge Dresdner, Universidad de Concepcion
	INFORMAL MARKETS AND VERTICAL CONTROL: BROKERABLE OF PERISHABLE PRODUCTION Julio A. Peña-Torres, Dept. of Economics, Univ. Alberto Hurtado
16:15 - 18:00	8P: GENETICALLY MODIFIED FOODRoom 554Chairperson: Ekin Birol, University of Cambridge
	LATENT MARKET SEGMENTATION ANALYSIS OF THE DEMAND FOR GM DERIVED FOODS: IMPLICATIONS FOR THE EU'S GM LABELLING REGIME. Mitsuyasu Yabe, kyushu University Co-Author(s): Andreas Kontoleon, Department of Land Economy,
	University of Cambridge GOVERNING THE CO-EXISTENCE OF GM CROPS: EX-ANTE REGULATION AND EX-POST LIABILITY UNDER UNCERTAINTY AND IRREVERSIBILITY Justus Wesseler, Wageningen University Co-Author(s): Volker Beckmann, Humboldt University and Claudio Soregaroli,
	ESTIMATING MEXICAN FARMERS' VALUATION OF MILPA DIVERSITY AND GENETICALLY MODIFIED MAIZE: A CHOICE EXPERIMENT APPROACH Ekin Birol, University of Cambridge Co-Author(s): Eric Rayn Villalba, University College London
16:15 - 18:00	8Q: NUCLEAR POWER Room K Chairperson: Takaaki Kato, Tokyo Institute of Technology
	A THEORETICALLY-CONSISTENT EMPIRICAL MODEL OF NON-EXPECTED UTILITY: AN APPLICATION TO

	<ul> <li>NUCLEAR-WASTE TRANSPORT</li> <li>Mary Riddel, University of Nevada, Las Vegas</li> <li>Co-Author(s): W. Douglass Shaw, Texas A&amp;M</li> <li>EFFECTIVENESS OF COMPENSATION FOR THE RI- LIVING NEAR A NUCLEAR POWER STATION: A NA EXPERIMENT</li> <li>Takaaki Kato, Tokyo Institute of Technology</li> <li>WINNERS, LOSERS, AND THE NUCLEAR-WASTE DILER</li> <li>Mary Riddel, University of Nevada, Las Vegas</li> <li>Co-Author(s): R. Keith Schwer, University of Nevada, Las V</li> </ul>	TURAL
19:00 - 21:00	SOCIAL EVENT: AN EVENING WITH TRADITIONA SUMMER NIGHT ENTERTAINMENT	L JAPANESE
19:00 - 21:00	SOCIAL EVENT: AN EVENING WITH TRADITIONAL	Room Swan

JAPANESE SUMMER NIGHT ENTERTAINMENT

Chairperson:

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### FRIDAY 7 JULY 2006

08:45 - 10:30	PARALLEL SESSIONS 09
08:45 - 10:30	SYMPOSIUM SESSION: 9A: THE ENVIRONMENT       Room B-2         INDUSTRY       Room Sinclair-Desgagné, HEC         Montréal       Kernard
	Organizer: Bernard Sinclair-Desgagné, HEC Montréal
	THE PIGOUVIAN TAX RULE IN THE PRESENCE OF AN ECO-INDUSTRY Bernard Sinclair-Desgagné, HEC Montréal
	ENVIRONMENTAL TAXATION AND THE STRUCTURE OF THE ECO-INDUSTRY
	Alain-Désiré Nimubona, Institute of Applied Economics, HEC Montréal
	Co-Author(s): Maia David, UMR INRA-INAPG Economie Publique and Bernard Sinclair-Desgagné, HEC Montréal
	ENVRONMENTAL TAXATION AND INTERNATIONAL ECO-INDUSTRIES Joan Canton, Laboratoire GREQAM, Marseille, FRANCE
	<b>REVISITING THE ENVIRONMENTAL SUBSIDY</b> Maia David, UMR INRA-INAPG Economie Publique Co-Author(s): Bernard Sinclair-Desgagné, HEC Montréal
08:45 - 10:30	SYMPOSIUM SESSION: 9B: GAME-THEORETIC APPROACHES TO CLIMATE-POLICY ANALYSIS Chairperson: Barbara Buchner, Fondazione Eni Enrico Mattei Organizer: Barbara Buchner, Fondazione Eni Enrico MatteiRoom C-2
	PARALLEL CLIMATE BLOCS. INCENTIVES TO COOPERATION IN INTERNATIONAL CLIMATE NEGOTIATIONS Barbara Buchner, Fondazione Eni Enrico Mattei Co-Author(s): Carlo Carraro, University of Venice
	IMPACT OF RENEGOTIATIONS ON THE STABILITY OF INTERNATIONAL CLIMATE AGREEMENTS Rob Dellink, Wageningen University Co-Author(s): Ekko van Ierland, Wageningen University and
	Hans-Peter Weikard, Wageningen University THE SAMUELSON RULE AND SIDE PAYMENTS IN EFFICIENT
	PROVISION OF STOCK EXTERNALITIES Zili Yang,
08:45 - 10:30	SYMPOSIUM SESSION: 9C: ASSESSING THERoom B-1SOCIALCAPACITYFORENVIRONMENTALMANAGEMENT:TOWARDSEFFECTIVEENVIRONMENTALCOOPERATIONINASIA(HIROSHIMA UNIVERSITY COE SESSION)Com B-1Com B-1

Chairperson: Shunji Matsuoka, Hiroshima University Organizer: Shunji Matsuoka, Hiroshima University DEVELOPMENT SOCIAL CAPACITY CAPACITY AND ASSESSMENT (SCA) FINTRODUCTION Shunji Matsuoka, Hiroshima University ELABORATING POLICY: THE AID TOWARD SOCIAL CAPACITY DEVELOPMENT FOR ENVIRONMENTAL MANAGEMENT IN ASIA Hideki Fuchinoue, Hiroshima University Co-Author(s): Shunji Matsuoka, Hiroshima University DEVELOPMENT STAGES MODEL OF SOCIAL CAPACITY FOR ENVIRONMENTAL MANAGEMENT Metin Senbil, Hiroshima University Co-Author(s): Shunji Matsuoka, Hiroshima University and Yoshi Takahashi, Hiroshima University AN EMPIRICAL STUDY OF THE METHODOLOGY FOR ASSESSING SOCIAL CAPACITY : THE CASE OF URBAN AIR QUALITY MANAGEMENT Kazuma Murakami, hiroshima university **EFFICIENCY-BASED** INDICATOR **DEVELOPMENT:** AN APPLICATION TO THE SOCIAL CAPACITY FOR **ENVIRONMENTAL MANAGEMENT IN ASIA** Katsuya Tanaka, Hiroshima University Co-Author(s): Hebin Lin, Hiroshima University 08:45 - 10:30 9D: AGRICULTURE II Room F Chairperson: Vishwambhar Prasad Sati, Eritrea Institute of Technology, Asmara, Eritrea, N. E. Africa WITH RELAXING **CONSTRAINTS** COMPENSATION: EVALUATING OFF-FARM LABOR RESPONSES то **REFORESTATION POLICY IN CHINA** Pauline Grosjean, University of Toulouse Co-Author(s): Ben Groom, School of Oriental and African Studies, Univ. London, Andreas Kontoleon, Department of Land Economy, University of Cambridge, Tim Swanson, University College London and Shiqiu Zhang, College of Environmental Sciences, Beijing University GLOBALIZATION AND THE POVERTY-ENVIRONMENT LINK IN ASIAN AGRICULTURE Ian Coxhead, University of Wisconsin ALTERNATIVE SOIL FERTILITY MANAGEMENT OPTIONS IN MALAWI: AN ECONOMIC ANALYSIS Hardwick Tchale, College of Agriculture, University of Malawi Co-Author(s): Johannes Sauer, Institute for Food and Resource Economics, Royal Veterinary and Agricultural University Copenhagen SUSTAINABLE HORTICULTURAL FARMING IN THE **MOUNTAIN REGIONS - A CASE FOR THE PINDAR BASIN OF CENTRAL HIMALAYA** Vishwambhar Prasad Sati, Eritrea Institute of Technology, Asmara, Eritrea, N. E. Africa

08:45 - 10:30	<b>9E: CLIMATE CHANGE II</b> Chairperson: Stephane Hallegatte, CESP / ENPC	Room E
	DO INTENSITY TARGETS CONTROL UNCERTAINTY BETTER THAN QUOTAS? CONDITIONS, CALIBRATIONS AND CAVEATS Franck Lecocq, Laboratory of Forestry Economics and ROBERT MARSCHINSKI, Potsdam Institute for Climate Impact Research GLOBAL WARMING: TO BELIEVE OR NOT TO BELIEVE? Ram Ranjan, University of Florida COMBINING TOP-DWON AND BOTTOM-UP IN ENERGY POLICY ANALYSIS: A DECOMPOSITION APPROACH Christoph Böhringer, Centre for European Economic Research WHY ECONOMIC GROWTH MATTERS IN ASSESSING CLIMATE CHANGE DAMAGES: ILLUSTRATION ON EXTREME EVENTS Stephane Hallegatte, CESP / ENPC Co-Author(s): Jean-Charles Hourcade, CIRED/CNRS	
08:45 - 10:30	<b>9F: DISTRIBUTIONAL CONCERNS</b> Chairperson: Douglas Noonan, Georgia Institute of Technology	Room G
	DISTRIBUTIONALEFFECTSOFENVIRONMENTALREGULATION IN THE CZECH REPUBLICMilan Scasny, Charles University Environmental CenterCo-Author(s): Jan Bruha, Charles University Environment CenterTHE INCOME-POLLUTION RELATIONSHIP AND THE ROLE OFINCOMEDISTRIBUTIONEVIDENCEFROMSWEDISHHOUSEHOLD DATATarekGhalwash, department of economic-Umeauniversity-SwedenCo-Author(s): Runar Brännlund, Department of Economics, UmeåUniversityWEALTHHETEROGENEITYANDESCAPEFROMPOVERTY-ENVIRONMENT TRAPMasako Ikefuji, Graduate School of Economics, Osaka UniversityCo-Author(s): Ryo Horii, Graduate School of Economics, OsakaUniversitySUPERFUND, HEDONICS, ANDTHESUPERFUND, HEDONICS, ANDENVIRONMENTAL JUSTICEDouglas Noonan, Georgia Institute of TechnologyCo-Author(s): Brett Baden, Tufts University and Rama MohanaTuraga, Georgia Institute of Technology	
08:45 - 10:30	<b>9G: NON-RENEWABLE RESOURCES</b> Chairperson: Therese Lindahl, The Beijer International institute of Ecological economics	Room H
	MUDDY WATERS: SOIL EROSION AND DOWNSTREAM EXTERNALITIES Anders Ekbom, Department of Economics, Göteborg University	

	Co-Author(s): Gardner Brown, University of Washington <b>RULE OF LAW AND THE RESOURCE CURSE: ABUNDANCE</b> <b>VERSUS INTENSITY</b> Catherine S. Norman, The Johns Hopkins University <b>NATURAL RESOURCE ABUNDANCE AND ECONOMIC</b> <b>GROWTH IN LATIN AMERICA</b> Mario Fernandez, Escuela Superior Politecnica del Litoral <b>IGNORANT EXPLOITATION OF A COMMON RESOURCE</b> Therese Lindahl, The Beijer International institute of Ecological economics	
08:45 - 10:30	9H: NON-TIMBER FOREST PRODUCTS II Chairperson: Raul Brey, Pablo de Olavide University	Room I
	<ul> <li>SPATIAL AND TEMPORAL MODELING OF COMMUNITY NON-TIMBER FOREST EXTRACTION</li> <li>Elizabeth JZ Robinson, University of Oxford</li> <li>Co-Author(s): Heidi J. Albers, Oregon State University and Jeffrey</li> <li>C. Williams, University of California - Davis</li> <li>VOLUNTARY AGREEMENTS IN PROTECTING PRIVATE OWNED FORESTS IN FINLAND- TO BUY OR TO LEASE?</li> <li>Artti Juutinen, Department of Economics, University of Oulu</li> <li>Co-Author(s): Erkki Mäntymaa, Department of Economics, University of Oulu, Mikko Mönkkönen, Department of Biological and Environmental Science, University of Jyväskylä and Rauli Svento, Department of Economics, University of Oulu</li> <li>INVENTORYING NATURAL CAPITAL VALUES OF TROPICAL RAINFORESTS: NON-TIMBER FOREST PRODUCTS</li> <li>Suren Batagoda, Environment and Economic Consultancy Service (EECS)</li> <li>Co-Author(s): R.K. Turner, Centre for Social and Economic Research on</li> <li>ESTIMATION OF FOREST VALUES USING THE CONTINGENT GROUPING METHOD</li> <li>Raul Brey, Pablo de Olavide University</li> <li>Co-Author(s): Joan Mogas, Rovira i Virgili University and Pere Riera, Department of Applied Economics, Autonomous University of Barcelona, E-08193 Bellaterra, Spain.</li> </ul>	
08:45 - 10:30	9I: TRADE AND THE ENVIRONMENT II Chairperson: Kakali Mukhopadhyay, CDEP, INDIAN INSTITUTE OF MANAGEMENT CALCUTTA	Room J
	HAVE COUNTRIES WITH LAX ENVIRONMENTAL REGULATIONS A COMPARATIVE ADVANTAGE IN POLLUTING INDUSTRIES? Miguel Quiroga, EEU, Department of Economics, University of Gothenburg, Sweden & Department of Economics, University of Concepcion, Chile Co-Author(s): Martin Persson, Department of Physical Resource Theory, Chalmers University of Technology, Sweden and Thomas Sterner, University of Göteborg	

	<ul> <li>INCREASING TRADE OF RECYCLABLES AND RELEVANT POLICY PRINCIPLES</li> <li>Kazuhiro Okuma, Ministry of the Environment, JAPAN</li> <li>THE ENVIRONMENTAL EFFECTS OF FREE TRADE AGREEMENTS: A DYNAMIC CGE ANALYSIS FOR CHILE</li> <li>Raul O'Ryan, Industrial Engineering Department , University of Chile</li> <li>POLLUTION HAVENS OR FACTOR ENDOWMENTS: A STUDY ON THAILAND</li> <li>Kakali Mukhopadhyay, CDEP, INDIAN INSTITUTE OF MANAGEMENT CALCUTTA</li> </ul>
08:45 - 10:30	<b>9J: VALUATION: THEORETICAL CONTRIBUTIONS</b> Room 501 Chairperson: Olvar Bergland, Norwegian University of Life Sciences
	<ul> <li>THE EVALUATION OF NONMARKET GOODS: RECOVERING PREFERENCES IN HOUSEHOLD PRODUCTION MODELS Udo Ebert, University of Oldenburg</li> <li>ROBUST BENEFIT TRANSFER FUNCTION: A BAYESIAN MODEL AVERAGING APPROACH</li> <li>Roberto Leon Gonzalez, University of Leicester</li> <li>Co-Author(s): Riccardo Scarpa, University of Waikato, Economics Dpt</li> <li>BENEFIT TRANSFER: A HIERARCHICAL BAYESIAN APPROACH</li> <li>Olvar Bergland, Norwegian University of Life Sciences</li> </ul>
08:45 - 10:30	9K: FORESTRY IN DEVELOPING COUNTRIES IIRoom KChairperson:RandallBluffstone,PortlandStateUniversity
	<ul> <li>WILLINGNESS TO PAY FOR IMPROVED WATERSHED MANAGEMENT: THE CASE OF HOUSEHOLDS IN METRO MANILA, THE PHILIPPINES</li> <li>Margaret Calderon, University of the Philippines Los Baños Co-Author(s): Leni Camacho, UP Los Baños, Myrna Carandang, UP Los Baños, Josefina Dizon, UP Los Baños, Lucrecio Rebugio, UP Los Baños and Noel Tolentino, UP Los Baños</li> <li>AGRICULTURAL SUBSIDIES AND FOREST PRESSURE IN MALAWI'S MIOMBO WOODLANDS</li> <li>Gerald Shively, Department of Agricultural Economics, Purdue University</li> <li>Co-Author(s): Monica Fisher, Department of Geography, University of South Carolina</li> <li>CHINA'S SLOPING LAND CONVERSION PROGRAM: DOES EXPANSION EQUAL SUCCESS?</li> <li>Michael Bennett, Visiting Scholar, Center for Chinese Agricultural Policy, IGSNRR, CAS</li> <li>Co-Author(s): Ran Tao, The Institute of Chinese Studies, University of Oxford, Zhigang Xu, Center for Chinese Agricultural Policy, IGSNRR. CAS and Jintao Xu, Deputy Director, Center for Chinese Agricultural Policy, IGSNRR, CAS</li> </ul>

	DOES BETTER COMMON PROPERTY FOREST MANAGEMENT PROMOTE ON-FARM TREE PLANTING AND TECHNOLOGY ADOPTION? EVIDENCE FROM BOLIVIA Randall Bluffstone, Portland State University Co-Author(s): Marco Boscolo, Harvard University and Ramiro Molina, University of Cordillera
08:45 - 10:30	<b>9L: ENVIRONMENTAL RISKS II</b> Room 509 Chairperson: Margherita Turvani, University of Venice-IUAV
	<ul> <li>ECONOMIC VALUATION OF FLOOD RISK EXPOSURE AND FLOOD CONTROL IN A SEVERELY FLOOD PRONE DEVELOPING COUNTRY</li> <li>Roy Brouwer, Institute for Environmental Studies</li> <li>Co-Author(s): Sonia Aftab, North South University, Luke Brander, Institute for Environmental Studies and Enamul Haque, Economic Research Group</li> <li>THEORETICAL ARGUMENTS FOR RISK MANAGEMENT THROUGH COMMUNITY-BASED WILDLIFE CONSERVATION AND WILDLIFE DAMAGE INSURANCE IN ZIMBABWE</li> <li>Edwin Muchapondwa, University of Cape Town</li> <li>Co-Author(s): Thomas Sterner, University of Göteborg</li> <li>PROPORTIONALITY OF WILLINGNESS TO PAY TO SMALL RISK CHANGES - THE IMPACT OF ATTITUDINAL FACTORS IN SCOPE TESTS</li> <li>Andrea Leiter, alpS - Center for Natural Hazard Management/University of Innsbruck</li> <li>Co-Author(s): Gerald J. Pruckner, University of Innsbruck</li> <li>PUBLIC SUPPORT FOR POLICIES ADDRESSING CONTAMINATED SITES: EVIDENCE FROM A SURVEY OF THE ITALIAN PUBLIC</li> <li>Margherita Turvani, University of Venice-IUAV</li> <li>Co-Author(s): Anna Alberini, AREC, University of Maryland and FEEM, Venice, Aline Chiabai, Fondazione Eni Enrico Mattei and Stefania Tonin, University of VEnice-IUAV</li> </ul>
08:45 - 10:30	<b>9M: POVERTY</b> Room 553 Chairperson: Nicholas Nwanyek Ngepah, International Center for Economic Research; University of Yaounde II-Soa
	RURALPOVERTYANDFUELWOODCONSUMPTION:EVIDENCEFROM LABAGOUMEN TOWNSHIP (CHINA)Sylvie Demurger, HIEBS (Hong Kong) & CNRS (France)Co-Author(s): Martin Fournier, CEFCWAR-INDUCED TRANSIENT POVERTY AND ENVIRONMENTALDEGRADATION:EVIDENCEFROM BURKINAFASO, WESTAFRICATakeshi Sakurai, Policy Research InstituteCo-Author(s):Kimseyinga Savadogo, University of OuagadougouPOVERTYANDTHEENVIRONMENT:EXPLORINGTHEBETWEEN HOUSEHOLD INCOMES, PRIVATE

	<b>ASSETS AND NATURAL ASSETS</b> Urvashi Narain, Resources for the Future and Klaas van 't Veld, University of Wyoming Co-Author(s): Shreekant Gupta, Delhi School of Economics
08:45 - 10:30	9N: INTERJURISDICTIONAL COMPETITIONRoom 554Chairperson: Thomas Kuhn, University of Chemnitz
	ARE NIMBY'S COMMUTERS? Bert Saveyn, Catholic University Leuven SPATIAL INTERACTION IN WASTE MANAGEMENT AND POLICY-MAKING Katia Karousakis, University College London LOCAL INCOME TAXATION AND LOW-DENSITY FISCAL ZONING Joshua Templeton, U.S. Environmental Protection Agency ON ENVIRONMENTAL POLICIES OF LOCAL GOVERNMENTS IN A FEDERATION WITH EQUALIZING GRANTS, MOBILE CAPITAL, AND ASYMMETRIC INFORMATION
	Thomas Kuhn, University of Chemnitz Co-Author(s): Martin Altemeyer-Bartscher, University of Chemnitz
08:45 - 10:30	90: ECONOMIC GROWTH AND THE Room C-1 ENVIRONMENT III Chairperson: Christian Groth, University of Copenhagen
	CURSING THE BLESSINGS? NATURAL RESOURCE ABUNDANCE, INSTITUTIONS, AND ECONOMIC GROWTH Christa Brunnschweiler, ETH Zurich / University of Zurich PUBLIC BADS, GROWTH AND WELFARE Hirofumi Shibata, Osaka U. & Ritsumeikan Asia Pacific U. Co-Author(s): Toshihiro Ihori, Professor, University of Tokyo STATUS-SEEKING, GROWTH AND ENDOGENOUS ENVIRONMENTAL AND ECONOMIC POLICIES Thi Kim Cuong PHAM, CERDI Co-Author(s): PHU NGUYEN VAN, THEMA-CNRS, Universite de Cergy-Pontoise GROWTH AND NON-RENEWABLE RESOURCES REVISITED Christian Groth, University of Copenhagen
10:30 - 11:00	COFFEE BREAK
11:00 - 12:30	PLENARY SESSION
11:00 - 12:30	PLENARY 4: BUSINESS AND ENVIRONMENTAL Room Main Hall RESPONSIBILITY

Chairperson: Eiji Hosoda , Keio University

## BUSINESS AND ENVIRONMENTAL RESPONSIBILITY

Geoffrey M Heal, Columbia Business School

12:30 - 14:00	LUNCH
12:30 - 14:00	EDE EDITORIAL BOARD MEETING (BY INVITATION ONLY)
12:30 - 14:00	EDE EDITORIAL BOARD MEETING (BY INVITATION ONLY)Room KChairperson: Anastasios Xepapadeas, University of Crete and President of EAERE
14:00 - 15:45	PARALLEL SESSIONS 10
14:00 - 15:45	SYMPOSIUM SESSION: 10A: MANAGING NATURAL RESOURCES FOR GROWTH AND POVERTY REDUCTION IN SOUTH ASIARoom B-2Chairperson: Amita Shah, Gujarat Institute of Development Research Organizer: Amita Shah, Gujarat Institute of Development Research and Priya Shyamsundar,Room B-2
	LOCAL INSTITUTIONS AND FOREST PRODUCTS EXTRACTION: EVIDENCE FROM FOREST MANAGEMENT IN NEPAL Arun Khatri-Chhetri, IDEC, Hiroshima University LAND DEGRADATION AND MIGRATION IN A DRY LAND REGION IN INDIA Amita Shah, Gujarat Institute of Development Research COMMON POOL RESOURCES AS DEVELOPMENT DRIVERS: A STUDY OF NTFPS IN HIMACHAL PRADESH, INDIA Purnamita Dasgupta, Institute of Economic Growth, Delhi, India CAN PARTICIPATORY WATERSHED MANAGEMENT BE SUSTAINED? EVIDENCE FROM SOUTHERN INDIA Suresh Kumar Devarajulu, TAMIL NADU AGRICULTURAL UNIVERSITY
14:00 - 15:45	SYMPOSIUM SESSION: 10B: VALUATION OF ENVIRONMENTAL HEALTH RISKS TO CHILDREN Chairperson: William Wheeler, Organizer: William Wheeler,Room C-1
	OVERVIEW OF U.S. EPA ACTIVITIES RELATING TO CHILDREN'S HEALTH VALUATION William Wheeler,

	Co-Author(s): Chris Dockins, U.S. EPA, NCEE and nathalie simon, <b>ALTRUISM AND ENVIRONMENTAL RISKS TO HEALTH OF</b> <b>CHILDREN AND THIER PARENTS</b> Shelby Gerking, Co-Author(s): Mark Dickie, Department of Economics <b>VALUING CANCER RISK REDUCTIONS: DO AGE OF</b> <b>EXPOSURE AND LATENCY MATTER?</b> nathalie simon, Co-Author(s): Chris Dockins, U.S. EPA, NCEE
14:00 - 15:45	10C:INTERNATIONALENVIRONMENTALRoom C-2AGREEMENTS IIChairperson: Sylvie Thoron, IAS/GREQAM
	EVALUATION OF INTERNATIONAL VOLUNTARY PROTOCOLS USING PROGRAM EVALUATION AND PLACEBO PROTOCOLS.Sigve Tjøtta, University of Bergen Co-Author(s): Arild Aakvik, University of BergenHOW THE DESIGN OF INTERNATIONAL ENVIRONMENTAL AGREEMENTS AFFECTS THE INVESTMENT IN ENVIRONMENTALLY FRIENDLY TECHNOLOGIES? Basak Bayramoglu, PSE and CES Université Paris 1INTERTEMPORAL MANDATES AND THE PROVISION OF LONG-TERM PUBLIC GOODSFranck Lecocq, Laboratory of Forestry Economics Co-Author(s): Jean-Charles Hourcade, CIRED/CNRSNEGOTIATING NEGOTIATING ENVIRONMENTAL MANDATES OF PUTTING THE CART BEFORE THE HORSE Sylvie Thoron, IAS/GREQAM
14:00 - 15:45	<ul> <li>10D: POLITICAL ECONOMY II Recommendation</li> <li>Chairperson: Bernardo Mueller, Dept. of Economics, University of Brasilia</li> <li>POLITICAL ECONOMY AND IRRIGATION TECHNOLOGY ADOPTION IMPLICATIONS OF WATER PRICING UNDER ASYMMETRIC INFORMATION</li> <li>Chokri Dridi, University of Alberta</li> <li>Co-Author(s): Madhu Khanna, University of Illinois at Urbana-Champaign</li> <li>THE POLITICAL ECONOMY OF POLICY ADOPTION: STATE-LEVEL NATURAL RESOURCE DAMAGE PROGRAMS</li> <li>Wallapak Polasub, Department of Economics, Kasetsart University Co-Author(s): Amy Ando, University of Illinois at Urbana-Champaign</li> <li>AGRICULTURAL EXPANSION, INTEREST GROUPS AND DEFORESTATION IN MAURITIUS: A DYNAMIC APPROACH</li> </ul>

	WHO ENFORCES ENFORCEMENT?: CAN PUBLIC PROSECUTORS IN BRAZIL BREAK THE ENDLESS REGRESS? Bernardo Mueller, Dept. of Economics, University of Brasilia
14:00 - 15:45	10E: R&D AND TECHNOLOGICAL DEVELOPMENTRoom FIIChairperson: William Barnes, Assistant Professor, Economics, University of PortlandRoom F
	MEASURING ENERGY PRICE INDUCED TECHNOLOGICAL CHANGE: A GLOBAL ANALYSIS USING DIRECTIONAL DISTANCE FUNCTION Surender Kumar, TERI School of Advanced Studies THE DIRECTION OF TECHNICAL CHANGE IN CAPITAL-RESOURCE ECONOMIES Simone Valente, ETH Zurich
	Co-Author(s): Corrado Di Maria, Tilburg University <b>CLEAN TECHNOLOGY AND REVERSE LOGISTICS ADOPTION</b> <b>IN THE STEEL INDUSTRY</b> William Barnes, Assistant Professor, Economics, University of Portland Co-Author(s): Kanwalroop Kathy Dhanda, and Mark Meckler, University of Portland
14:00 - 15:45	<b>10F: RECREATIONAL ACTIVITIES II</b> Room KChairperson: Luke Brander, Institute for Environmental StudiesRoom K
	THE IMPACT OF SPEED LIMITS ON RECREATIONAL BOATING IN THE LAGOON OF VENICE Valentina Zanatta, DICAS Politecnico di Torino and Fondazione Eni Enrico Mattei Co-Author(s): Anna Alberini, AREC, University of Maryland and FEEM, Venice, Dimitrios Reppas, AREC Dept University of Maryland and Paolo Rosato, DIC - Università di Trieste e Fondazione ENI Mattei
	VALUATION OF NATURAL RECREATIONAL SITES : THE CONTINGENT TRAVEL COST METHOD Gildas Appéré, CEDEM - University of Western Brittany VALUING A WATER RECREATION FACILITY USING SEMI PARAMETRIC ESTIMATORS IN THE TRAVEL COST METHOD Jaime Torres Mónica Marcela, Universidad de Concepción Co-Author(s): Alejandro Tudela Román, Civil Engineering Department, Universidad de Concepcion THE RECREATIONAL VALUE OF CORAL REEFS: A
	<b>META-ANALYSIS</b> Luke Brander, Institute for Environmental Studies Co-Author(s): Herman Cesar, Institute for Environmental Studies and Pieter van Beukering, Institute for Environmental Studies
14:00 - 15:45	<b>10G: RENEWABLE ENERGY II</b> Room GChairperson: Ujjayant Chakravorty, University of

Central Florida

	<ul> <li>WILLINGNESS TO PAY FOR REDUCED VISUAL DISAMENITIES</li> <li>FROM OFF-SHORE WIND FARMS IN DENMARK</li> <li>Jacob Ladenburg, Ph.d. student, Institute of Food and Resource</li> <li>Economics, The Royal Veterinary and Agricultural University, Denamrk</li> <li>Co-Author(s): Alex Dubgaard, Institute of Food and Resource</li> <li>Economics, The Royal Veterinary and Agricultural University</li> <li>RENEWABLE ENERGY AND MACROECONOMIC EFFICIENCY</li> <li>OF OECD AND NON-OECD ECONOMIES</li> <li>Taichen Chien, National Chiao Tung University</li> <li>Co-Author(s): Jin-li Hu, National Chiao Tung University</li> <li>PRODCING FOOD AND CLEAN ENERGY: LAND IN A</li> <li>HOTELLING MODEL</li> <li>Ujjayant Chakravorty, University of Central Florida and Michel Moreaux, Université de Toulouse 1 (IUF, IDEI and LERNA)</li> <li>Co-Author(s): Bertrand MAGNE, University of Toulouse 1 (CEA and LERNA)</li> </ul>	
14:00 - 15:45	<b>10H: VALUEING LIVES</b> Chairperson: Aline Chiabai, Fondazione Eni Enrico Mattei	Room H
	LABOR MARKET ESTIMATES OF THE SENIOR DISCOUNT FOR THE VALUE OF STATISTICAL LIFE Joseph Aldy, Resources for the Future Co-Author(s): W. Kip Viscusi, Harvard Law School VALUE OF A STATISTICAL LIFE – CASE OF POLAND Marek Giergiczny, Warsaw University INDIVIDUATED VSLS AND THE DEAD ANYWAY HYPOTHESIS Mary Evans, University of Tennessee Co-Author(s): Kerry Smith, North Carolina State University DISCOUNT RATES IN RISK V. MONEY AND MONEY V. MONEY TRADEOFFS Aline Chiabai, Fondazione Eni Enrico Mattei Co-Author(s): Anna Alberini, AREC, University of Maryland and FEEM, Venice	
14:00 - 15:45	<b>10I: WATER: IRRIGATION II</b> Chairperson: Karina Schoengold, University of Nebraska	Room I
	THE ALBERTA DILEMMA: OPTIMAL SHARING OF A WATER RESOURCE BY AN AGRICULTURAL AND AN OIL SECTOR Gérard Gaudet, Université de Montréal Co-Author(s): Michel Moreaux, Université de Toulouse 1 (IUF, IDEI and LERNA) and Cees Withagen, Department of Economics, University of Tilburg and CENTER, Tilburg ANALYSIS OF THE ADOPTION OF IRRIGATION TECHNOLOGIES UNDER UNCERTAIN WATER AVAILABILITY Javier Calatrava - Leyva, Universidad Politécnica de Cartagena Co-Author(s): Maria Jesus Escribano, IFAPA - Junta de Andalucia	

	THE ECONOMICS OF TIERED PRICING, COST FUNCTIONS, AND EQUITY IMPLICATIONS Karina Schoengold, University of Nebraska Co-Author(s): David Zilberman, University of California at Berkeley
14:00 - 15:45	<b>10J: GAME THEORY AND THE ENVIRONMENT II</b> RoomChairperson: Philippe Delacote, Euopean University InstituteRoom
	<ul> <li>GOOD REGULATORY MANDATES</li> <li>Anthony Heyes, University of London</li> <li>INFORMATIVE ADVERTISING BY ENVIRONMENTAL GROUPS</li> <li>Pim Heijnen, University of Groningen</li> <li>MODELLING PARETO-EFFICIENT REDUCTION OF</li> <li>TRANS-FRONTIER POLLUTION AS A NON-CCOPERATIVE</li> <li>GAME</li> <li>Andries Nentjes, University of Groningen</li> <li>Co-Author(s): Serge Shibayev, London School of Economics (LSE)</li> <li>ARE CONSUMER BOYCOTTS EFFECTIVE?</li> <li>Philippe Delacote, Euopean University Institute</li> </ul>
14:00 - 15:45	10K:GROUNDWATER:THEORETICALRoom 50°APPROACHESChairperson: Nicholas Brozovic, University of Illinois at Urbana-ChampaignUrbana-Champaign
	<ul> <li>CONSIDERING STRATEGIC AND STOCK EXTERNALITIES IN COMMON PROPERTY GROUNDWATER MANAGEMENT POLICIES</li> <li>Mahadev Bhat, Florida International University</li> <li>Co-Author(s): Mahadev Bhat, Florida International University, M. G.</li> <li>Chandrakanth, University of Agricultural Sciences and A. Rajendra, University of Agricultural Sciences</li> <li>GROUNDWATER USE UNDER INCOMPLETE INFORMATION</li> <li>Jeffrey Peterson, Kansas State University</li> <li>Co-Author(s): Alexander Saak, Kansas State University</li> <li>ECONOMIC OPTIMIZATION OF GROUNDWATER RESOURCES OVER SPACE AND TIME</li> <li>Nicholas Brozovic, University of Illinois at Urbana-Champaign Co-Author(s): David Sunding, University of California, Berkeley and David Zilberman, University of California at Berkeley</li> </ul>
14:00 - 15:45	10L: INNOVATION IIRoom 509Chairperson: Roger Wehrli, ETH Zurich
	ENVIRONMENTAL REGULATION AND INNOVATION THROUGH THE FORMATION OF NETWORKS: THE DEVELOPMENT OF LEAD-FREE SOLDERS IN JAPAN, EUROPE, AND THE UNITED STATES Masaru Yarime, University of Tokyo THE INFLUENCE OF DIFFERENT CHARACTERISTICS OF THE EU ENVIRONMENTAL MANAGEMENT AND AUDITING

	SCHEME ON TECHNICAL ENVIRONMENTAL INNOVATIONS AND ECONOMIC PERFORMACE Klaus Rennings, Centre for European Economic Research (ZEW) Co-Author(s): Kathrin Ankele, Institute for Ecological Economy Research (IÖW), Esther Hoffmann, Institute for Ecological Economy Research (IÖW) and Andreas Ziegler, Centre for European Economic Research (ZEW) THE IMPORTANCE OF TECHNOLOGICAL CHANGE IN CLIMATE POLICY ASSESSMENT Roger Wehrli, ETH Zurich Co-Author(s): Gay Saxby, ETH Zurich
14:00 - 15:45	10M:KYOTOEMISSIONTRADING (NOMURARoom B-1HOLDINGS SESSION)Chairperson:CathrineHagem,DepartmentofEconomics, University of OsloChairpersonChairpersonChairpersonChairperson
	<ul> <li>SWEDISH INDUSTRY AND KYOTO - AN ASSESSMENT OF THE EFFECTS OF THE EUROPEAN CO2 EMISSION RIGHTS TRADING SYSTEM</li> <li>Tommy Lundgren, Dept of Forest econ, SLU -UMEÅ, Sweden Co-Author(s): Runar Brännlund, Department of Economics, Umeå University</li> <li>LINKING EMISSIONS TRADING SCHEMES VERSUS "KYOTO" TRADING: AN ECONOMIC IMPACT ASSESSMENT</li> <li>Niels Anger, Centre for European Economic Research (ZEW)</li> <li>Co-Author(s): Christoph Böhringer, Centre for European Economic Research</li> <li>DISTRIBUTIONAL CONSTRAINTS AND EFFICIENCY IN THE TRADEABLE PERMIT MARKET.</li> <li>Cathrine Hagem, Department of Economics, University of Oslo Co-Author(s): Hege Westskog, CICERO Oslo</li> </ul>
14:00 - 15:45	10N: THEORY OF ENVIRONMENTAL POLICY IIIRoom 510Chairperson: Matthieu Glachant, CERNA - Ecole des Mines de ParisRoom 510
	THE EFFECT OF JOINT AND SEVERAL LIABILITY UNDER SUPERFUND ON BROWNFIELDS Howard F. Chang, University of Pennsylvania Law School Co-Author(s): Hilary Sigman, Rutgers University OPTIMAL MANAGEMENT OF AN EUTROPHIED COASTAL ECOSYSTEM: BALANCING AGRICULTURAL AND MUNICIPAL ABATEMENT MEASURES Marita Laukkanen, Co-Author(s): Anni Huhtala, MTT Agrifood Research Finland THE USE OF WARNINGS WHEN INTENDED AND MEASURED EMISSIONS DIFFER Sandra Rousseau, K.U.Leuven THE ORGANIZATION OF EXTENDED PRODUCER RESPONSIBILITY UNDER IMPERFECT COMPETITION Matthieu Glachant, CERNA - Ecole des Mines de Paris Co-Author(s): Pierre Fleckinger, Ecole Polytechnique and INRA

100: ENVIRONMENTAL REGULATION AND THERoom 553FIRMChairperson: Laura Onofri, Faculty of Economics, University of Bologna
INTEGRATED ENVIRONMENTAL PRODUCTS AND PROCESSES IN THE GERMAN AUTOMOTIVE INDUSTRY AND THEIR IMPACT ON COMPETITIVENESS Johann Wackerbauer, Ifo Institute for Economic Research Co-Author(s): Ursula Triebswetter, Ifo Institute for Economic Research DOES FORMAL OR INFORMAL ENVIRONMENTAL REGULATION HAVE AN IMPACT ON COST? AN EMPIRICAL ANALYSIS OF THE BRAZILIAN MANUFACTURING INDUSTRY. Arnaud Reynaud, LERNA-INRA, University of Toulouse OPERATIONAL COMPLEXITY, UNCERTAINTY AND ENVIRONMENTAL MANAGEMENT SYSTEM CERTIFICATION DECISIONS: JAPANESE MANUFACTURERS Masao Nakamura, University of British Columbia Co-Author(s): Takuya Takahashi, Univ. of Shiga Prefecture, School of Environmental Science TESTING WILLIAMSON THEORY ON TRANSACTION-SPECIFIC GOVERNANCE STRUCTURES: EVIDENCE FROM THE ELECTRICITY MARKETS Laura Onofri, Faculty of Economics, University of Bologna
10P:CONTINGENTVALUATION:Room 554METHODOLOGICAL ASPECTS IIIChairperson:MasahideWatanabe,Hall of GlobalEnvironmental Research, Kyoto University
<ul> <li>THE DISCREPANCY BETWEEN UTILITY DIFFERENCE AND EXPENDITURE DIFFERENCE INTERPRETATION FOR THE DOUBLE-BOUNDED DISCRETE CHOICE CONTINGENT VALUATION RESPONSES</li> <li>Shou-Lin Yang, Department of Agricultural Economics, National Taiwan Universiyt</li> <li>Co-Author(s): Pei-Ing Wu, Dept. of Agricultural Economics, National Taiwan University</li> <li>STARTING POINT BIAS AND RESPONDENT UNCERTAINTY IN DICHOTOMOUS CHOICE CONTINGENT VALUATION SURVEYS</li> <li>Guillaume Hollard, Université de Marne la Vallée</li> <li>Co-Author(s): Flachaire Emmanuel, Université de Paris1</li> <li>CONSISTENT ESTIMATION OF MEAN WTP IN DICHOTOMOUS CHOICE CONTINGENT VALUATION</li> <li>Masahide Watanabe, Hall of Global Environmental Research, Kyoto University</li> <li>Co-Author(s): Kota Asano, Graduate School of Human and Environmental Studies, Kyoto University</li> </ul>

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	BIODIVERSITY AND GEOGRAPHY Michael Rauscher, Universitaet Rostock Co-Author(s): Edward Barbier, University of Wyoming SPATIAL PATTERNS OF BIODIVERSITY CONSERVATION IN A MULTIREGIONAL GENERAL EQUILIBRIUM MODEL Florian Eppink, Institute for Environmental Studies, Vrije Universiteit Amsterdam
	Co-Author(s): Cees Withagen, Department of Economics, University of Tilburg and CENTER, Tilburg <b>THE SPATIAL STRUCTURE OF RANGELAND SYSTEMS</b> Martin F. Quaas, UFZ - Center for Environmental Research Leipzig-Halle
16:15 - 18:00	<b>11B: THEORY OF ENVIRONMENTAL POLICY IV</b> Room C-1Chairperson: Sophie Legras, University of Montpellier 1and Australian National University
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	Dirk Rübbelke, Chemnitz University of Technology Co-Author(s): Bouwe Dijkstra, University of Nottingham THE USE OF MULTIPLE POLICY INSTRUMENTS FOR ENVIRONMENTAL PROTECTION: AN ECONOMIC PERSPECTIVE Lori Bennear, Duke University Co-Author(s): Robert Stavins, Harvard University
	GROUP PERFORMANCE BASED INSTRUMENTS TO MANAGE ENVIRONMENTAL ISSUES : AN ANALYSIS IN THEORY AND PRACTICE Sophie Legras, University of Montpellier 1 and Australian National University
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	CONSUMER BEHAVIOR ON REPAIR-MAINTENANCE AND WASTE MANAGEMENT POLICY FOR DURABLE GOODS Hideyuki Akaishi, Graduate School of Social Studies, Major of

	Economics, Hosei University, Tokyo, JAPAN. EXPLAINING VARIATION IN AMENITY COSTS OF LANDFILL:
	META-ANALYSIS AND BENEFIT TRANSFER Harry Walton, University of Bath
	Co-Author(s): Richard Boyd, University of Bath, Anil Markandya, University of Bath and Tim Taylor, University of Bath
	PROPOSAL OF HOUSEHOLD ECONOMY-ENVIRONMENT ACCOUNTS BY HOUSEHOLD TYPE
	Yuko Kanamori, Graduate school of Engineering, Kyoto University Co-Author(s): Yuzuru Matsuoka, Graduate school of Engineering, Kyoto University
	ECONOMIC ANALYSIS OF DEPOSIT-REFUND SYSTEMS WITH MEASURES FOR MITIGATING NEGATIVE IMPACTS ON SUPPLIERS
	Daisuke Numata, Kobe University, Japan Society for the Promotion of Science
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	DO EXPERIENCE AND CHEAP TALK INFLUENCE WILLINGNESS TO PAY IN AN OPEN-ENDED CONTINGENT VALUATION SURVEY? Peter Martinsson, department of economics, göteborg University Co-Author(s): Fredrik Carlsson, Department of Economics,
	Göteborg University MOTIVES FOR ANSWERING BEHAVIOR IN CONTINGENT VALUATION: AN EXPERIMENTAL SURVEY FOR EVALUATING THE MITIGATION OF GLOBAL WARMING IMPACTS Takaaki Kato, Tokyo Institute of Technology
	Co-Author(s): Noboru Hidano, Tokyo Institute of Technology WILLINGNESS-TO-PAY ESTIMATION USING LIKELIHOOD DATA WITH RANDOM VALUATION THEORY
	Hua Wang, World Bank Co-Author(s): Jie He, Universit¨l d; <sup>~</sup> Auvergne
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	ECONOMY-WIDE MODEL OF REBOUND EFFECT FOR ENVIRONMENTAL EFFICIENCY Toyoaki Washida, Sohpia University
	CGE ANALYSIS OF THE IMPACT OF A CARBON ENERGY TAX ON THE IRISH ECONOMY
	Wiepke Wissema, Trinity College Dublin Co-Author(s): Rob Dellink, Wageningen University DIRECTED TECHNICAL CHANGE AND CLIMATE POLICY
	Andreas Löschel, European Commission, DG Joint Research Centre, Institute for Prospective Technological Studies (IPTS)

	Co-Author(s): Vincent Otto, Joint Program on the Science and Policy of Global Change, MIT and John Reilly, Joint Program on the Science and Policy of Global Change, MIT	
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	MEASURING DYNAMIC COSTS OF SOIL DEGRADATION FOR SMALLHOLDER FARMERS IN MALAWI. Teddie Oliver Nakhumwa, University of Malawi, Bunda College of Agriculture	
	<b>OPTIMAL SOIL MANAGEMENT AND ENVIRONMENTAL</b> <b>POLICY</b> Oueslati Walid, Department of Economics, National Institute of Horticulture Co-Author(s): Lafforgue Gilles, LEERNA	
	SOIL PROPERTIES AND CONSERVATION TECHNOLOGIES IN AGRICULTURAL PRODUCTION - A CASE STUDY OF KENYA'S CENTRAL HIGHLANDS Anders Ekbom, Department of Economics, Göteborg University	
16:15 - 18:00	<b>11G: TRADABLE PERMITS III</b> Roo Chairperson: Frank Jotzo, Australian National University	om B-1
	ALLOCATING PERMITS PROPORTIONAL TO CURRENT EMISSIONS IS NOT PARETO IMPROVING Ronan CONGAR, Université de Rouen and CARE ABUSE OF EMISSIONS TRADING SYSTEMS FOR TACIT COLLUSION Ralf Löschel, Universität Karlsruhe (TH) Co-Author(s): Karl-Martin Ehrhart, University of Karlsruhe and Christian Hoppe, University of Karlsruhe CAPS AND SAFETY VALVES FOR EMISSIONS MARKETS UNDER UNCERTAINTY Akira Maeda, Kyoto University PRICE CAPS FOR INTERNATIONAL PERMIT TRADING UNDER UNCERTAINTY WITH HETEROGENEOUS MARKET PARTICIPANTS Frank Jotzo, Australian National University	
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	<ul> <li>CONTRACTS IN FRANCE</li> <li>Geraldine Ducos, INRA</li> <li>Co-Author(s): Pierre Dupraz, INRA</li> <li>FARMER MANAGEMENT OF PRODUCTION RISK ON DEGRADED LANDS: THE ROLE OF WHEAT BIODIVERSITY IN TIGRAY REGION, ETHIOPIA</li> <li>Salvatore Di Falco, CSERGE- University of East Anglia, UK Co-Author(s): Jean-Paul Chavas, and Melinda Smale,</li> <li>ECONOMIC INCENTIVES FOR ENTRY AND EXIT IN GUM ARABIC AGROFORESTRY SYSTEM IN SUDAN</li> <li>Afaf Rahim, Environmental Economics and Natural Resources Co-Author(s): Ekko,C. van Ierland, Wageningen University and Justus Wesseler, Wageningen University</li> </ul>	
16:15 - 18:00	11I: ECONOMIC GROWTH AND THE ENVIRONMENT IV Chairperson: Gang Liu, Statistics Norway	Room I
	RELATIONSHIP BETWEEN ECONOMIC GROWTH AND WASTEMANAGEMENT:DYNAMICWASTEINPUT-OUTPUTAPPROACHKazuyo Yokoyama, Tohoku UniversityCo-Author(s): Shigemi KAGAWA, TOHOKU UniversityDIVERGENCEINSTATE-LEVELPERCAPITACARBONDIOXIDE EMISSIONSJoseph Aldy, Resources for the FutureACAUSALITYANALYSISONGDPANDAIREMISSIONSINNORWAYGang Liu, Statistics NorwayConstantConstantConstantConstantConstant	
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16:15 - 18:00	11K: REGIONAL ENVIRONMENTAL PROBLEMS IN Room 501 ASIA
	Chairperson: Randall Bluffstone, Portland State University
	<ul> <li>WHO IS RESPONSIBLE FOR WHAT: REGIONAL ECOLOGICAL FOOTPRINT CALCULATION FOR CHINA WITH SPECIAL EMPHASIS ON INTERREGIONAL DEPENDENCY</li> <li>Xin Zhou, Graduate School of Environmental Studies, Nagoya University</li> <li>Co-Author(s): Hidefumi Imura, Graduate School of Environmental Studies and Hiroaki Shirakawa, Graduate School of Environmental Studies, Nagoya University</li> <li>ENVIRONMENTAL SOFT LOAN PROGRAM IN ASIAN COUNTRIES: LESSONS FOR FOREIGN ENVIRONMENTAL ASSISTANCE</li> <li>Akihisa Mori, Kyoto University</li> <li>ENVIRONMENTAL RESTORATION OF MINAMATA Fumikazu Yoshida, Hokkaido University</li> <li>MIXING ECONOMIC AND ADMINISTRATIVE INSTRUMENTS: THE CASE OF SHRIMP AQUACULTURE IN THAILAND</li> <li>Randall Bluffstone, Portland State University</li> <li>Co-Author(s): Dararatt Anantanasuwong, National Institute of Development Administration and ivan Ruzicka, Private consultant</li> </ul>
16:15 - 18:00	11L:ENVIRONMENTALKUZNETSCURVE:Room 509EMPIRICAL RESULTS IIChairperson:Je-Liang Liou, Department of AgriculturalEconomics, National Taiwan University
	<ul> <li>ECOLOGICAL FOOTPRINT: A CONSUMPTION-BASED APPROACH TO ENVIRONMENTAL KUZNETS CURVES</li> <li>Silvana Dalmazzone, University of Turin</li> <li>Co-Author(s): Marco Bagliani, IRES Piemonte and Giangiacomo Bravo, Dipartimento di Studi Sociali, Università di Brescia</li> <li>ECONOMETRIC TESTING OF EMPIRICAL EVIDENCE ON INCOME-POLLUTION HYPOTHESIS IN INDIA</li> <li>Vijaya Gupta, National Institute of Industrial Engineering, Mumbai</li> <li>ENVIRONMENTAL KUZNETS CURVE AND SOCIAL KUZNETS</li> <li>CURVE: AN EXAMINATION OF THE SUSTAINABLE</li> <li>DEVELOPMENT EXPERIENCE IN TAIWAN</li> <li>Je-Liang Liou, Department of Agricultural Economics, National Taiwan University</li> <li>Co-Author(s): Ming-Ta Su, Department of Business Administration, China University of Tachnology, Taiwan and Pei-Ing Wu, Dept. of Agricultural Economics, National Taiwan University</li> </ul>
16:15 - 18:00	11M: FAMILY AND CHILDRENRoom 510Chairperson:MilanScasny,CharlesUniversityEnvironmental Center

### ENVIRONMENTAL DETERMINANTS OF CHILD MORTALITY IN

#### KENYA

Clive J. Mutunga, Kenya Institute for Public Policy Research and Analysis (KIPPRA)

IS THERE A ROLE FOR THE UNITARY MODEL OF HOUSEHOLD DECISION MAKING WITH RESPECT TO CHILD SAFETY IN A TRADITIONAL FAMILY SETTING?

Claire Cockeril, Queen's University Belfast

Co-Author(s): Susan Chilton, University of Newcastle and George. Hutchinson, Queen's University Belfast

AVERTING BEHAVIOUR AND PARENTAL ALTRUISM IN INFANT MORBIDITY VALUATION: A CV SURVEY IN THE CZECH REPUBLIC

Marketa Braun Kohlova, Charles University Environment Center Co-Author(s): Milan Scasny, Charles University Environmental Center

16:15 - 18:00	11N: CLIMATE CHANGE POLICIESRoom EChairperson: Kenju Akai, Osaka University
	SOCIAL WELFARE FUNCTIONS IN GLOBAL CLIMATE-ECONOMY MODELS: METHODOLOGICAL INCONSISTENCIES AND THEIR POLICY IMPLICATIONS Hans-Martin Fuessel, Stanford University
	GLOBAL WARMING POTENTIAL, OPTIMAL ABATEMENT TARGETS, AND THE DESIGN OF CLIMATE POLICY Stephane De Cara, INRA UMR Economie Publique INRA/INAPG Co-Author(s): Elodie Debove, INRA UMR Economie Publique INRA/INAPG and Pierre-Alain Jayet, INRA UMR Economie Publique INRA/INAPG
	MEASURING THE EFFICIENCY COSTS OF TRANSITIONAL CLIMATE POLICIES Christoph Böhringer, Centre for European Economic Research Co-Author(s): Ulf Moslener, ZEW, Centre for European Economic Research
	DESIGNING DOMESTIC INSTITUTION TO COPE WITH GLOBAL WARMING WITH LABORATORY EXPERIMENTS Kenju Akai, Osaka University Co-Author(s): Takao Kusakawa, Hiroshima Shudo University and Tatsuyoshi Saijo, Osaka University
16:15 - 18:00	110: ENVIRONMENTAL PLANNINGRoom 553Chairperson: Miroslav Tomin, engeneerRoom 553
	MULTI-AGENT BASED DECISION-MAKING MODEL FOR ENVIRONMENTAL PLANNING UNDER THE UNCERTAINTY OF SOCIALITY: DAM LAKE UTILIZATION PLANNING WITH REGIONAL ALLIANCES Shoichi Kiyama, Kyoto University QUANTIFICATION OF STAKEHOLDER PREFERENCES TO FACILITATE COLLABORATIVE ENVIRONMENTAL PLANNING DECISIONS Caroline Hermans, U.S. Geological Survey

### GOOD GOVERNMENT FOR THE GOOD ENVIRONMENT PUBLIC RELATIONS IN ENVIRONMENT PROTECTION (EXAMPLE OF WATER POLLUTION)

Miroslav Tomin, engeneer Co-Author(s): Vanja Barisic Jokovic, PR manager

16:15 - 18:00 **11P: ECOSYSTEM MANAGEMENT** Chairperson: Rui Mota, Environment and Energy Section - DEM - IST

Room 554

#### **OPTIMAL PEST CONTROL IN AGRICULTURE**

Rüdiger Pethig, University of Siegen

Co-Author(s): Thomas Christiaans, University of Siegen and Thomas Eichner, University of Siegen

# ECOSYSTEM PORTFOLIOS: A FINANCE-BASED APPROACH TO ECOSYSTEM MANAGEMENT

Martin D Smith, Duke University Co-Author(s): Douglas W Lipton, University of Maryland and James N Sanchirico, Resources for the Future

# OPTIMAL ECOSYSTEM MANAGEMENT WITH STRUCTURAL DYNAMICS

Rui Mota, Environment and Energy Section - DEM - IST Co-Author(s): Tiago Domingos, Environment and Energy Section, DEM, Instituto Superior Técnico

#### SIDE EVENTS

Following informal side events will be held during the Congress.

"Economics of Catastrophe"

July 5th, 8:45-10:30, Room 553

Speakers:Yoshiaki Kawata, Kyoto UniversityMichael Hanemann, University of California, BerkeleyStephene Hallegate, Stanford University

"Establishing Green Tax System for a Low Carbon Society in Japan: Symposium in Memory of Publishing THE POLITICAL ECONOMY OF ENVIRONMENTALLY RELATED TAXES by Organization for Economic Cooperation and Development (OECD)

July 5, 2006 (16:00-18:00), B2, Gold Room of Kyoto Takaragaike Prince Hotel (Located in front of the Kyoto International Conference Hall)

Organizers: OECD, Japanese Ministry of the Environment, Society for Environmental Economics and Policy Studies

Speakers:Yuriko Koike, Ministery of the EnvironmentLorents G. Lorentsen, OECD Environment DirectorateTakamitsu Sawa, Ritsumeikan UniversityYoshihiro Fujii, Sophia University

"The history and prospect of Environmental Economics and Policy Studies in East Asia"

July 7th, 8:45-10:30, Room 510

Chair: Kazuhiro Ueta, Kyoto University and President of SEEPS

Speakers:

Cao Dong, Chinese Academy for Environmental Planning "The history and prospect of Environmental Economics and Policy Studies in China"

Daigee Shaw, Institute of Economics Academia Sinica "The history and prospect of Environmental Economics and Policy Studies in Taiwan"

Il-Chung Kim, Dongguk University "The history and prospect of Environmental

Economics and Policy Studies in Korea"

Kazuhiro Ueta, Kyoto University and President of SEEPS "The history and prospect of Environmental Economics and Policy Studies in Japan"

"The Sustainable and Cyclical Economy in Asia"

July 7th, 14:00-17:00, Room D

Chair: Fumikazu Yoshida, Hokkaido University and Shun'ichi Teranishi, Hitotsubashi University

Speakers:

- Ming Lei, Peking University "Study of Harmony Development Path between Economy and Environment in China (1985-2003)"
- Li Jinhui "Consideration on Legal framework on establishing a recycling society in China"
- Lihchyi Wen, Chung-Hua Institution for Economic Research "The Economic Incentive Effects of Combined Product Tax and Recycling Subsidy"

Michikazu Kojima, IDE "International Trade of Recyclable Resources in Asia"

- So Sasaki, Hokkaido University "Current status and Problems of WEEE Management in Thailand"
- Ken'ichi Togawa, Kumamoto University "Background of the Automobile Recycling Law Enactment in Japan"

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