9.00 Main Hall Welcome and Opening Session

9.30 Main Hall

Keynote Lecture 1 (Chair: Bart Los, University of Groningen) Paul Schreyer (OECD, Paris): *SAMs and Microdata: New Areas of Research*

10.15 **Coffee Break**

10.45 Main Hall

Flash Session 1 (Program to be announced)

11.30

Parallel Sessions 1

1a: Special Session on Disaster Analysis 1 (International Conference Room)

1b: Special Session on Scenario Analysis and 21st Century Sustainability 1 (Room 11)

1c: Special Session on Interregional Input-Output Analysis in China 1 (Room 32)

1d: Energy (Room 22)

1e: Environmental Analyses (Room 33)

1f: Special Miyazawa Memorial Session 1 (Room 21a)

1g: Advances in Input-Output Methodologies (Room 21b)

13.00

Lunch (1F: Event Hall)

14.30

Parallel Sessions 2

2a: IDE Special Session on Global Value Chains 1 (International Conference Room)

2b: Special Session on Disaster Analysis 2 (Room 11)

2c: International Trade and the Environment 1 (Room 32)

2d: Regional Analyses (Room 22)

2e: Structural Change 1 (Room 33)

2f: Performance Measurement and Analysis (Room 21a)

2g: Special Session on Tourism 1 (Room 21b)

16.00 **Coffee Break**

16.30

Parallel Sessions 3

3a: IDE Special Session on Global Value Chains 2 (International Conference Room)

3b: Evaluating Environmental Policies (Room 11)

3c: International Trade and the Environment 2 (Room 32)

3d: Regional Data and Models (Room 22)

3e: Construction and Use of New Databases (Room 33)

3f: Special Session on Sustainable Production and Enterprise IO Models (Room 21a)

18.00 End of Sessions

18.30

Journal of Economic Structures Editorial Board Meeting (Invitation only) (3F: Room 31)

11.30 - 13.00 International Conference Room
Parallel Session 1a: Special Session on Disaster Analysis 1
Organizers: Yasuhide Okuyama and Joost Santos
Chair: Yasuhide Okuyama (University of Kitakyushu)

Takeo Ihara (Chubu Region Institute for Social and Economic Research Institute, Nagoya) and Michiya Nozaki (University of Groningen) A Critical Review of the Impact Studies for Unscheduled Natural Disasters

Eduardo A. Haddad (University of São Paulo) and Yasuhide Okuyama (University of Kitakyushu) Spatial Propagation of the Economic Impacts of Bombing: The Case of the 2006 War in Lebanon

Masato Yamazaki (Nagoya University), Yoshinori Sone (Nagoya University), Atsushi Koike (Nagoya University) and Kazuhiro Tatano (Nagoya University) Economic Restoration after a Natural Disaster: A Computable General Equilibrium Study

11.30 - 13.00 Room 11 Parallel Session 1b: Special Session on Scenario Analysis Addressing 21st Century Sustainability 1 Organizer: Faye Duchin

Chair: Rosa Duarte (University of Zaragoza)

Faye Duchin (Rensselaer Polytechnic Institute, Troy) New Directions in Scenario Analysis: Exploiting the Unique Features of Input-Output Economics

Nathaniel Springer (University of California at Davis) and Faye Duchin (Rensselaer Polytechnic Institute, Troy) *The Global Distribution of Factor Rents from Agricultural Production in 2050*

Carlos A. Lopez-Morales (Arizona State University, Mexico City) Achieving Water Sustainability: Analyzing Scenarios Restricting Water Withdrawals from Surface and Underground Sources with an Inter-Regional Model of the Mexican Economy

11.30 - 13.00 Room 32 Parallel Session 1c: Special Session on Interregional Input-Output Analysis in China Organizer: Li Shantong

Chair: Xuemei Jiang (Chinese Academy of Sciences, Beijing)

Shantong Li (Development Research Centre of the State Council, Beijing), Sanmang Wu (Development Research Centre of the State Council, Beijing) and Jianwu He (Development Research Centre of the State Council, Beijing)

How to Evaluate the Impact of Export on Provincial Economy in China – Based on China's Inter-regional Input-Output Model

Wenqing Pan (Tsinghua University) and Yaxiong Zhang (State Information Center, Beijing) China's Regional Economic Spillover and Feedback Effects from 1997 to 2007

Zhipeng Tang (Chinese Academy of Sciences, Beijing), Weidong Liu (Chinese Academy of Sciences, Beijing), Fangyi Li (Chinese Academy of Sciences, Beijing) and Peiping Gong (Chinese Academy of Sciences, Beijing)

A Study of Eight Regional Average Spatial Distances of Value Added and Carbon Emissions Indirectly Affected by Chinese Exports

11.30 - 13.00 Room 22 **Parallel Session 1d: Energy** Chair: Maaike C. Bouwmeester (University of Groningen)

Ayu Washizu (Waseda University, Tokyo), Keiichiro Asakura (Ryutsu Keizai University, Ryugasaki City), Satoshi Nakano (Japan Institute for Labour Policy and Training, Tokyo) and Koji Takase (Shizuoka University) *Input-Output Analysis of the Introduction of Renewable Energy and Smart Grid Systems*

Haiyan Zhang (Rutgers University, New Brunswick) and Michael L. Lahr (Rutgers University, New Brunswick) Chinese Household Energy Use from 1987 to 2007

Paola Rocchi (University of Barcelona), Monica Serrano (University of Barcelona) and Jordi Roca (University of Barcelona) *The Reform of the European Energy Tax Directive: Effects on Prices*

11.30 - 13.00 Room 33

Parallel Session 1e: Environmental Analyses

Chair: Keisuke Nansai (National Institute for Environmental Studies, Tsukuba)

Matías José Piaggio (University Autonoma de Barcelona, Bellaterra), Vicent Alcantara (University Autonoma de Barcelona, Bellaterra) and Emilio Padilla (University Autonoma de Barcelona, Bellaterra) Input–Output Subsystems: Agro Industrial CH4 and Services CO₂ Emissions in Uruguay

Rutger Hoekstra (Statistics Netherlands, Voorburg) A Complete Database of Peer-reviewed Articles on Environmentally Extended Input-Output Analysis

11.30 - 13.00 Room 21aParallel Session 1f: Special Miyazawa Memorial Session 1Organizers: Geoffrey J.D. Hewings and Albert SteengeChair: Albert Steenge

Geoffrey J.D. Hewings (University of Illinois, Urbana-Champaign) Miyazawa's Contributions to Extended Input-Output Analysis: Introduction to the Special Sessions

Bjarne Madsen (Centre for Regional and Tourism Research, Copenhagen) and Jie Zhang (Centre for Regional and Tourism Research, Copenhagen) Regional Impacts of Export Jobs, the Miyazawa Extended Demographic Model Revisited

Joaquim Guilhoto (University of São Paulo), Carlos R. Azzoni (University of São Paulo), Denise Imori (University of São Paulo) and Ricardo Luis Lopes (State University of Marínga)

The Importance of Households and Productive Structure for Electricity Consumption in Brazil: A Leontief-Miyazawa Approach

11.30 - 13.00 Room 21b **Parallel Session 1g: Advances in Input-Output Methodologies** Chair: Esteban Fernandez (University of Oviedo)

Vito Albino (Politecnico di Bari) and Ilaria Giannoccaro (Politecnico di Bari) Input/Output-based Fitness Landscapes

Daju Xu (Shandong Jiaotong University, Jinan), Kuishuang Feng (University of Maryland, College Park) and Klaus Hubacek (University of Maryland, College Park) *Structural Decomposition Methods: A Comparative Analysis*

14.30 - 16.00 International Conference Room
Parallel Session 2a: IDE Special Session on Global Value Chains 1
Organizer: Satoshi Inomata
Chair: Satoshi Inomata (Institute for Developing Economies-JETRO, Chiba)

Bart Los (University of Groningen), Erik Dietzenbacher (University of Groningen), Robert Stehrer (Vienna Institute for International Economic Studies, WIIW), Marcel Timmer (University of Groningen) and Gaaitzen de Vries (University of Groningen) *Trade Performance in Internationally Fragmented Production Networks: Concepts and Measures*

Robert B. Koopman (US International Trade Commission, Washington DC), Marinos Tsigas (US International Trade Commission, Washington DC), David Riker (US International Trade Commission, Washington DC) and William Powers (US International Trade Commission, Washington DC) *The Implications of Using Value-Added Data for Applied Trade Policy Analysis*

Robert Stehrer (Vienna Institute for International Economic Studies WIIW) Accounting Relations in Bilateral Value Added Trade

14.30 - 16.00 Room 11

Parallel Session 2b: Special Session on Disaster Analysis 2

Organizers: Yasuhide Okuyama and Joost Santos

Chair: Joost Santos (George Washington University, Washington DC)

Yuko Oshita (Kyushu University, Fukuoka), Shigemi Kagawa (Kyushu University), Ryoji Hasegawa (Osaka International University) and Sangwon Suh (University of California at Santa Barbara) *Identifying Economic Impacts on Japanese Supply Chains Caused by the Tohoku*

Earthquake: Using a Structural Path Decomposition Technique and Japanese 47 Region Multiregional Input-Output Table

Eduardo A. Haddad (University of São Paulo) and Eliane Teixeira (University of São Paulo) Regional Economic Impacts of Natural Disasters in Megacities: The Case of Floods in São Paulo, Brazil

Yoshio Kajitani (Central Research Institute of Electric Power Industry, Tokyo) and Hirokazu Tatano (Kyoto University)

Estimation of Production Capacity Losses after the Great East Japan Earthquake

14.30 - 16.00 Room 32Parallel Session 2c: International Trade and the Environment 1 Chair: Kirsten S. Wiebe (GWS, Osnabrueck)

Rutger Hoekstra (Statistics Netherlands, Voorburg), Daan Zult (Statistics Netherlands, Voorburg), Ronghao Wu (Statistics Netherlands, Voorburg), Bram Edens (Statistics Netherlands, Voorburg) and Harry C. Wilting (Netherlands Environmental Assessment Agency PBL, Den Haag) Environmental Footprints from the Perspective of Official Statistics

Robbie M. Andrew (CICERO, Oslo), Glen P. Peters (CICERO, Oslo) and Steven J Davis (University of California at Irvine) Dependence on Foreign Carbon

Keiichiro Kanemoto (Tohoku University, Sendai), Daniel Moran (University of Sydney), Manfred Lenzen (University of Sydney) and Arne Geschke (University of Sydney) International Trade Undermines National Emission Reduction Targets

14.30 - 16.00 Room 22

Parallel Session 2d: Regional Analyses

Chair: Joaquim Guilhoto (University of Sao Paulo)

Xiuli Liu (Chinese Academy of Sciences, Beijing) and Geoffrey J.D. Hewings (University of Illinois, Urbana-Champaign) Economic Structure and Structural Changes of Chicago Economy during 1995-2010: Hierarchical Feedback Loop Input-Output Analysis

d'Artis Kancs (European Commission, JRC-IPTS, Sevilla/University of Leuven) Modelling of Agglomeration and Dispersion in RHOMOLO

Jong-Hwan Ko (Pukyong National University, Busan) A Study on Economic Effects of the Regional Comprehensive Economic Partnership in East Asia Using a Computable General Equilibrium Model

14.30 - 16.00 Room 33Parallel Session 2e: Structural Change 1Chair: Hak K. Pyo (Seoul National University)

Xiaolin Lu (Chinese Academy of Sciences, Beijing) and Xu Jian (Chinese Academy of Sciences, Beijing) Research on Regional Disparity and Its Influential Factors of Input-Output Coefficients

Shri Prakash (Birla Institute of Management Technology, Greater Noida)) and Ritu Sharma (Institute of Management Studies, Noida) Multiplier Effect on Growth of Income and Investment: Analysis of Sequential Rounds in Input- Output Framework

14.30 - 16.00 Room 21aParallel Session 2f: Performance Measurement and AnalysisChair: Antonio F. Amores (European Commission, JRC-IPTS, Sevilla)

Mun-Heng Toh (National University of Singapore) Using Input-Output Techniques and Data Envelopment Analysis to Evaluate the Economic and Environmental Resource Usage of Singapore Industries

Thijs ten Raa (Tilburg University) Performance Measurement in an Input-Output Framework

Murilo Pagotto (University of Queensland, Brisbane) and Anthony Halog (University of Queensland, Brisbane) Towards a Circular Economy: An Application of Input-Output Oriented Approach to Improve Eco-efficiency of Australia's Food Industry

14.30 - 16.00 Room 21b
Parallel Session 2g: Special Session on Tourism 1
Organizers: Sachiyo Asahi, Andre Carrascal and Albert Steenge Chair: Tadayuki Hara (University of Central Florida, Orlando)

Mikio Suga (Hosei University) and Kozo Miyagawa (Keio University, Tokyo) Skyline Analysis for the Japanese Regional Tourism Economy

Eri Habu (Yamaguchi University) and Sachiyo Asahi (Mie University) The Impact and Evaluative Analysis of the Tourism Economy - A Case Study of ISO TC 228 in Japan

Makoto Kinoshita (Yamaguchi University) and Junichi Nomura (Yamaguchi University) Performance Analysis of the Convention Center in the Local City and Its Impact on the Regional Industrial Structure

16.30 - 18.00 International Conference Room
Parallel Session 3a: IDE Special Session on Global Value Chains 2
Organizer: Satoshi Inomata
Chair: Cuihong Yang (Chinese Academy of Sciences, Beijing)

Keiichiro Kanemoto (Tohoku University, Sendai) and Davide Rigo (UNCTAD, Geneva) *The UNCTAD-Eora GVC Database and its Applications in the World Investment Report* 2013

Neil Foster (Vienna Institute for International Economic Studies WIIW), Johannes Pöschl (Vienna Institute for International Economic Studies WIIW) and Robert Stehrer (Vienna Institute for International Economic Studies WIIW) *Offshoring and the Elasticity of Labour Demand*

Yaxiong Zhang (State Information Center, Beijing), Jianqin Yuan (State Information Center, Beijing) and Monan Zhang (State Information Center, Beijing) The Industrial and Employment Structure Change of China Under GVCs Measurement

16.30 - 18.00 Room 11Parallel Session 3b: Evaluating Environmental PoliciesChair: Avu Washizu (Waseda University, Tokyo)

Jean-Marc Philip (Aix-Marseille University, Aix-en-Provence), Julio Sánchez Chóliz (University of Zaragoza) and Cristina Sarasa (University of Zaragoza) Policy Strategies to Ensure Future Water Availability in a Spanish Semi-Arid Area: A Dynamic CGE Approach

Jing Li (Shandong University, Jinan), Dezhi Li (Shandong University, Jinan) and Chen Lin (Shandong University, Jinan) Does the "People's Daily" Affect Economic Structure and the Flow of Pollution Flow?

Ambiyah Abdullah (Institute for Global Environmental Strategies, Kanagawa) Modelling the Economic and Environmental Impacts of Forest Conversion to Palm Oil and REDD Project in Indonesia: An EIRSAM Model

16.30 - 18.00 Room 32

Parallel Session 3c: International Trade and the Environment 2

Chair: Jose Manuel Rueda-Cantuche (Pablo de Olavide University, Sevilla)

Jonas Karstensen (CICERO, Oslo), Glen Peters (CICERO, Oslo) and Robbie Andrew (CICERO, Oslo) Attribution of CO2 Emissions from Brazilian Deforestation to Consumers between 1990 and 2010

Xuemei Jiang (Chinese Academy of Sciences, Beijing) and Yifang Liu (Central University of Finance and Economics, Beijing)) Exports, Carbon and Global Value Chain: Case of ICT industry

Shigemi Kagawa (Kyushu University, Fukuoka), Shunsuke Okamoto (Kyushu University, Fukuoka), Sangwon Suh (University of California at Santa Barbara), Yasushi Kondo (Waseda University, Tokyo) and Keisuke Nansai (National Institute for Environmental Studies, Tsukuba)

Identifying Environmentally Important Clusters in the Global Supply Chain Network

16.30 - 18.00 Room 22

Parallel Session 3d: Regional Data and Models

Chair: Bjarne Madsen (Centre for Regional and Tourism Research, Copenhagen)

Mohd Khairul Hisyam Hassan (University of Malaysia Sarawak, Kota Samarahan) and Zakariah Abdul Rashid (Malaysian Institute of Economic Research) *Construction of an Inter-Regional Input-Output Table for Malaysia: The Case of Sarawak and the Rest of Malaysia*

Silvio M. Ichihara (Secretary of Transport- State of São Paulo), Joaquim Guilhoto (University of São Paulo), Denise Imori (University of São Paulo), Archibald Araujo da Silva (São Paulo State Secretary of Finance) and André L.G. Clemente (São Paulo State Secretary of Finance)

An Interregional Input-Output System for the 645 Municipalities of the São Paulo State: Integrating Different Approaches and Databases

Tsubasa Shibata (Institute for Developing Economies-JETRO, Chiba) and Kosaka Hiroyuki (Keio University, Kanagawa) An Input-Output Model Building for Nine Regions of Japanese Economy Based on Microeconomic Foundation

16.30 - 18.00 Room 33Parallel Session 3e: Construction and Use of New DatabasesChair: Arne Geschke (University of Sydney)

Anushree Sinha (National Council of Applied Economic Research, New Delhi) Estimating Jobs through Renewable Energy Sector

Arnold Tukker (Netherlands Organization for Applied Scientific Research TNO, Delft) *CREEA – Compiling and Refining Environmental and Economic Accounts*

Henrique Graça (Instituto Superior Técnico, Lisbon), Joao Rodrigues (Instituto Superior Técnico, Lisbon), Alexandra P.S. Marquez (Instituto Superior Técnico, Lisbon) and Antonio Rito Silva (Instituto Superior Técnico, Lisbon) *An Open and Collaborative Environmental Input-Output Database*

16.30 - 18.00 Room 21a Parallel Session 3f: Special Session on Sustainable Production and Enterprise IO Models

Organizers: Vito Albino and Devrim Murat Yazan Chair: Ignacio Cazcarro (Rensselaer Polytechnic Institute, Troy)

Vito Albino (Politecnico di Bari) and Devrim Murat Yazan (University of Twente, Enschede) Economic and Environmental Benefits of Industrial Symbiosis: An Enterprise Input-Output Analysis

Romulo Neves Ely (Federal University of Rio de Janeiro), Arunima Malik (University of Sydney) and Manfred Lenzen (University of Sydney) An Input-Output Analysis of a Future Australian Sugar-cane Biofuel Industry

Devrim Murat Yazan (University of Twente, Enschede) Environmental Performance of Biorefinery Supply Chains

9.00 Main Hall

Flash Session 2 (Program to be announced)

9.45 Main Hall

Keynote Lecture 2 (Chair: Satoshi Inomata, Institute for Developing Economies-JETRO, Tokyo)

Richard E. Baldwin (Graduate Institute of International and Development Studies, Geneva): *Misthinking Globalisation*

10.30

Coffee Break

11.00

Parallel Sessions 4

4a: Special Session on Intercomparison of MRIOs (International Conference Room)

4b: Key Sectors and Network Analysis (Room 11)

4c: IDE Special Session on Global Value Chains 3 (Room 32)

4d: Interregional Trade (Room 22)

4e: CGE Modelling of Environmental Problems (Room 33)

4f: Special Session on Tourism 2 (Room 21a)

4g: Special Session on Flow-of-Funds 2 (Room 21b)

13.00

Lunch (1F: Event Hall)

14.30

Parallel Sessions 5

5a: Special Session on Disaster Analysis 3 (International Conference Room)

5b: Impacts of Infrastructural Projects (Room 11)

5c: Special Session on Virtual Laboratories (Room 32)

5d: The Environment and Structural Change in China (Room 22)

5e: International Trade and the Environment 3 (Room 33)

5f: Special Miyazawa Memorial Session 2 (Room 21a)

5g: Special Session on the Use of National and Consolidated SUTs and IOTs 1 (Room 21b)

16.00 **Coffee Break**

16.30

Parallel Sessions 6

6a: Special Session on Scenario Analysis and 21st Century Sustainability 2 (International Conference Room)
6b: Special Session on "Regions Going Global" (Room 11)
6c: Special Session on Disaster Analysis 3 (Room 32)
6d: Structural Change 2 (Room 22)
6e: Regional Analyses of Water-Related Problems (Room 33)
6f: Construction of Interindustry Data (Room 21a)
6g: Special Session on Pioneers of Input-Output (Room 21b)

18.00 End of Sessions

18.10

Get together of young IO researchers (2F: International Conference Room)

18.30

Economic Systems Research Editorial Board Meeting (Invitation only) (3F: Room 31)

11.00 - 13.00 International Conference RoomParallel Session 4a: Special Session on Intercomparison of MRIOsOrganizer: Manfred LenzenChair: Manfred Lenzen (University of Sydney)

Arne Geschke (University of Sydney), Richard Wood (NTNU, Trondheim) and Keiichiro Kanemoto (Tohoku University, Sendai) Investigating Alternative Approaches to Harmonise MRIO Data

Anne Owen (University of Leeds), Kjartan Steen-Olsen (Norwegian University of Science and Technology, Trondheim), John Barrett (University of Leeds), Thomas Wiedmann (University of New South Wales, Sydney) and Manfred Lenzen (University of Sydney) *A Structural Decomposition Approach to Comparing Input-Output Databases*

Kirsten S. Wiebe (GWS, Osnabrück)and Manfred Lenzen (University of Sydney) To RAS or not to RAS – What is the Difference in Outcomes in Multi-Regional Input-Output Models?

Kjartan Steen-Olsen (Norwegian University of Science and Technology, Trondheim), Anne Owen (University of Leeds), Edgar G. Hertwich (Norwegian University of Science and Technology, Trondheim) and Manfred Lenzen (University of Sydney) *Effects of Aggregation in MRIO-based Environmental Accounting*

11.00 - 13.00 Room 11Parallel Session 4b: Key Sectors and Network AnalysisChair: Scott Kelly (University of Cambridge)

Martha G. Alatriste Contreras (Aix-Marseille School of Economics, Marseille) Global Centrality, Key Sectors, and Diffusion of Resources in an Economy: Evidence from France

Tulika Bhattacharya (Institute for Social and Economic Change, Bangalore) Measuring Linkages to Identify Key Sectors of the Indian Economy: An Application of Augmented Input-Output Analysis

Michael L Lahr (Rutgers University, New Brunswick) and Umed Temurshoev (European Commission, JRC-IPTS, Sevilla) Marginal multipliers: Hirschmann Revisited

Umed Temurshoev (European Commission, JRC-IPTS, Sevilla) and Jan Oosterhaven (University of Groningen) *Analytical and Empirical Comparison of Policy-Relevant Key Sector Measures*

11.00 - 13.00 Room 32Parallel Session 4c: IDE Special Session on Global Value Chains 3Organizer: Satoshi InomataChair: Geoffrey J.D. Hewings (University of Illinois, Urbana-Champaign)

Bart Los (University of Groningen), Marcel Timmer (University of Groningen) and Gaaitzen de Vries (University of Groningen) Made in Europe? Trends in International Production Fragmentation

Norihiko Yamano (OECD, Paris) and Bo Meng (Institute for Developing Economies-JETRO, Chiba) Re-measuring Comparative Advantage in Global Value Chains: An International Input-Output Approach

Yuwan Duan (University of Groningen/Chinese Academy of Sciences, Beijing), Erik Dietzenbacher (University of Groningen), Bart Los (University of Groningen) and Cuihong Yang (Chinese Academy of Sciences) *National Content in China's Exports: Changes and Causes*

Satoshi Inomata (Institute of Developing Economies-JETRO, Chiba) The Relative Positions of Countries in Regional Supply Chains in East Asia: Using a Model of Average Propagation Length

11.00 - 13.00 Room 22

Parallel Session 4d: Interregional Trade

Chair: d'Artis Kanc (European Commission, JRC-IPTS, Sevilla)

Weibo Xing (University of International Business and Economics, Beijing), Shantong Li (Development Research Center of the State Council, Beijing) and John Whalley (University of Western Ontario, London) *China's Interprovincial Trade and Domestic Market Integration: An Analysis Based on Provincial Input-Output Tables 1997-2007*

Keijiro Okuoka (Nagoya University), Yusuke Kito (Acaric Co., Tokyo), Tomer Fishman (Nagoya University) and Hiroki Tanikawa (Nagoya University) *Estimation of Inter-regional Human Time Input*

Francesca D.B. Solis (De la Salle University, Manila), Krista D.S. Yu (De la Salle University, Manila) and Raymond R. Tan (De la Salle University, Manila) *Evaluating the Impacts of Inoperability to Trade Relations among Regions in the Philippines*

Lin Hsing-Chun (National Chiayi University, Chiayi City) and Li-Chen Chou (National Chiayi University, Chiayi City) The Economic Impact of Cross-strait Agricultural Trade on Taiwan's Industries and Overall Economy—Regional Input-Output Analysis

11.00 - 13.00 Room 33 **Parallel Session 4e: CGE Modelling of Environmental Problems** Chair: Satoshi Tsuchiya (Tottori University)

Virginie Doumax (Aix-Marseille University), Jean-Marc Philip (Aix-Marseille University) and Cristina Sarasa (University of Zaragoza) *Biofuels, Tax Policies and Oil Price in France: Insights from a Dynamic CGE Model*

Moslem Bemanpoor (University of Tehran) and Ali Taherifard (Imam Sadiq University, Tehran)

A Study on the Effect of Increasing the Price of Electricity and Other Energy Carriers on Electricity Demand in the Industrial Sector in a Developing Economy using a Computable General Equilibrium Approach

Mingtai Fan (Chinese Academy of Social Sciences, Beijing), Taoyuan Wei (CICERO, Oslo), Xiaoguang Zhang (Australia Productivity Commission, Melbourne) and Yumei Zhang (Chinese Academy of Agricultural Sciences, Beijing)

The Composite Impact of the Low-Carbon Development Policies in Beijing's Urbanization: A Regional Dynamic CGE Modeling

Huey-Lin Lee (National Chengchi University, Taipei) and Ching-Cheng Chang (National Taiwan University, Taipei) Economy-Wide Impact Analysis of the Agricultural Extent Loss to Sea Level Rise: An Application of a Multi-regional Computable General Equilibrium Model

11.00 - 13.00 Room 21a

Parallel Session 4f: Special Session on Tourism 2

Organizers: Sachiyo Asahi, Andre Carrascal and Albert Steenge Chair: Albert Steenge

Tadayuki Hara (University of Central Florida, Orlando), YunY Zhong and Valeriya Shapoval *Quantifying the Impacts of an Economic Crisis over a Regional Tourism Industry and Economy – Discussion on Versatility of Tourism as an Industry*

Jie Zhang (Centre for Regional Tourism Research, Nexoe) and Bjarne Madsen (Centre for Regional Tourism Research, Nexoe) *Tourism Satellite Accounts and Modeling for Business Tourism – Case of Denmark*

Yang Lianling (Chinese Academy of Sciences, Beijing), Xikang Chen (Chinese Academy of Sciences, Beijing) and Cuihong Yang (Chinese Academy of Sciences, Beijing) Estimating the Imbalance of Service Trade between China and the U.S in Terms of Tourism Exports

Ya-Yen Sun (National Cheng Kung University, Tainan City) and Stephen Pratt (Hongkong Polytechnic University)

The Economic, Carbon Emissions and Water Impacts of Chinese Visitors to Taiwan: Eco-Efficiency and Long-Term Impact Evaluation

11.00 - 13.00 Room 21b
Parallel Session 4g: Special Session on Flow-of-Funds 2
Organizers: Kazusuke Tsujimura and Masako Tsujimura
Chair: Kazusuke Tsujimura (Keio University, Tokyo)

Makoto Hosoya (Bank of Japan, Tokyo) Flow of Funds Compilation: Measures to Close Data Gaps

Riccardo De Bonis (Bank of Italy, Roma), Massimo Coletta (Bank of Italy, Roma) and Stefano Piermattei (Bank of Italy, Roma) *Why Do Households Have Different Debts? New Evidence from the Flow-of-Funds*

Cagatay Telli (Ministry of Development, Ankara) and Sefa Cavdaroglu (Ministry of Development, Ankara) The Flow of Funds Methodology: A County Case Study on Applications and Analysis from Turkey

Masako Tsujimura (Keio University, Tokyo) and Kazusuke Tsujimura (Keio University, Tokyo) Tokyo) Foundations of Flow-of-Funds Based National Accounting

14.30 - 16.00 International Conference RoomParallel Session 5a: Special Session on Disaster Analysis 3Organizers: Yasuhide Okuyama and Joost SantosChair: Olaf Jonkeren (European Commission, JRC-IPSC, Ispra)

Joost R. Santos (George Washington University, Washington DC), Larissa May (George Washington University, Washington DC) and Amine El-Haimar (George Washington University, Washington DC) An Input-Output-Based Workforce Recovery Model for Disaster Risk Assessment: An

Application to a Pandemic Scenario

Krista D.S. Yu (De la Salle University, Manila), Raymond R. Tan (De la Salle University, Manila), Kathleen B. Aviso (De la Salle University, Manila), Michael A.B. Promentilla (De la Salle University, Manila) and Joost R. Santos (George Washington University, Washington DC)

A Vulnerability Index for Post-Disaster Management

Kathleen B. Aviso (De la Salle University, Manila), Raymond R. Tan (de la Salle University, Manila), Michael A.B. Promentilla (De la Salle University, Manila), Krista D. Yu (De la Salle University, Manila) and Joost R. Santos (George Washington University, Washington DC)

A Robust Optimization Model for Implementing a Biofuel Program in the Presence of Multiple Scenarios Brought By Disasters

14.30 - 16.00 Room 11Parallel Session 5b: Impacts of Infrastructural ProjectsChair: Euijune Kim (Seoul National University)

Erwin Corong (Monash University, Clayton), Lawrence Dacuycuy (De la Salle University, Manila), Rachel Reyes (De la Salle University, Manila) and Angelo Taningco (De la Salle University, Manila) *The Growth and Distributive Impacts of Public Infrastructure Investments in the Philippines*

Maaike C. Bouwmeester (University of Groningen) Assessing Cross-Border Impacts of Gas Infrastructure Investment Expenditure across Europe with MRIO

Scott Kelly (University of Cambridge), Peter Tyler (University of Cambridge) and Douglas Crawford-Brown (University of Cambridge) *Estimating the Macroeconomics of Infrastructure through the Key Linkages Hypothesis*

14.30 - 16.00 Room 32

Parallel Session 5c: Special Session on Virtual Laboratories

Organizer: Manfred Lenzen Chair: Thomas Wiedmann (University of New South Wales, Sydney)

Manfred Lenzen (University of Sydney), Arne Geschke (University of Sydney), Thomas Wiedmann (University of New South Wales, Sydney) and Joe Lane (University of Queensland, Brisbane) *Compiling and Using Input-Output Frameworks through Collaborative Virtual Laboratories*

Thomas Wiedmann (University of New South Wales, Sydney), Manfred Lenzen (University of Sydney), Joe Lane (University of Queensland, Brisbane) and Arne Geschke (University of Sydney)

The Collaborative "Mother" Approach to Compiling Large-Scale Multi-Region Input-Output Databases

Arne Geschke (University of Sydney), Thomas Wiedmann (University of New South Wales, Sydney), Manfred Lenzen (University of Sydney) and Joe Lane (University of Queensland, Brisbane) *Workflows in the Industrial Ecology Virtual Laboratory*

Joe Lane (University of Queensland, Brisbane), Thomas Wiedmann (University of New South Wales, Sydney), Manfred Lenzen (University of Sydney) and Arne Geschke (University of Sydney)

Advancing Sustainability Science through a Virtual Laboratory Approach to Input-Output Analysis

14.30 - 16.00 Room 22Parallel Session 5d: The Environment and Structural Change in China Chair: Dabo Guan (University of Leeds)

Fangyi Li (Chinese Academy of Sciences, Beijing) How Can China Realize Energy Intensity Target toward 2015: the Contribution of Structural Shifts

Dominik Wiedenhofer (Alpen Adria University, Klagenfurt), Dabo Guan (University of Leeds) and Jan C. Minx (Potsdam Institute for Climate Impact Research, Berlin) *CO*₂ *Requirements of Consumption in China: Inequality between Income Levels and Urban/Rural Living*

Biao Zhang (Chinese Academy of Sciences, Beijing) and Xiuli Liu (Chinese Academy of Sciences, Beijing) Empirical Study on Driving Factors of Water Consumption Growth in China

14.30 - 16.00 Room 33Parallel Session 5e: International Trade and the Environment 3 Chair: Erik Dietzenbacher (University of Groningen)

Xin Zhou (Institute for Global Environmental Strategies, Hamaya), Ambiyah Abdullah (Institute for Global Environmental Strategies, Hamaya), Satoshi Kojima (Institute for Global Environmental Strategies, Hamaya) and Hiroaki Shirakawa (Nagoya University) Accounting for the Carbon Footprints and Embodied Primary Resources using Multi-region Input-Output Tables

Alexandra Penedo de Sousa Marques (Technical University of Lisbon), Joao Rodrigues (Technical University of Lisbon) and Tiago Domingos (Technical University of Lisbon) *Carbon Footprint of Income*

Bernhard Michel (Belgian Federal Planning Bureau, Brussels) Is Offshoring Driven by Air Emissions? Testing the Pollution Haven Effect for Imports of Intermediates

14.30 - 16.00 Room 21a

Parallel Session 5f: Special Miyazawa Memorial Session 2

Organizers: Geoffrey J.D. Hewings and Albert Steenge Chair: Geoffrey J.D. Hewings (University of Illinois, Urbana-Champaign)

Albert Steenge (University of Groningen) Miyazawa's Income Distributions

Marcos M. Hasegawa (Federal University of Paraña, Curitibia), Moisés D. Vassallo (University of São Paulo), Joaquim J.M. Guilhoto (University of São Paulo), Carlos R Azzoni (University of São Paulo) and Geoffrey J.D.Hewings (University of Illinois, Urbana-Champaign)

Economic Interdependence between Parana State and Rest of Brazil: A Miyazawa Analysis

Hidayat Amir (Ministry of Finance of Indonesia, Jakarta) and Geoffrey J.D. Hewings (University of Illinois, Urbana-Champaign) Distributional Welfare Impact of the 2013 Adjustment of Tax-Free Income Threshold in Indonesia: A CGE Simulation

14.30 - 16.00 Room 21b

Parallel Session 5g: Special Session on the Use of National and Consolidated SUTs and IOTs in Europe 1

Organizers: Antonio F. Amores, Isabelle Remond-Tiedrez, Jose Manuel Rueda-Cantuche and Silke Stapel-Weber

Chair: Jose Manuel Rueda-Cantuche (Pablo de Olavide University, Sevilla)

Eduard F. Baranov (Higher School of Economics, Moscow), Igor A. Kim (Higher School of Economics, Moscow), Elena A. Staritsyna (Higher School of Economics, Moscow), Liubov A. Strizhkova (Institute of Macroeconomic Analysis) and Svetlana I. Kashirskaya (Institute of Macroeconomic Analysis)

Methods of Transforming Input-Output Accounts into the International Industrial and Product Classifications (the Russian Experience)

Jaroslav Sixta (University of Economics, Prague) and Petr Musil (University of Economics, Prague) The NACE Conversion of Januar Output Tables

The NACE Conversion of Input-Output Tables

José Manuel Rueda-Cantuche (Pablo de Olavide University, Sevilla), Antonio F. Amores (European Commission, JRC-IPTS, Sevilla) and Isabelle Rémond-Tiedrez (European Commission, Eurostat, Luxembourg)

Evaluation of Different Approaches to Convert Time Series of Supply and Use Tables from NACE Rev.1.1 into NACE Rev.2

16.30 - 18.00 International Conference Room

Parallel Session 6a: Special Session on Scenario Analysis Addressing 21st Century Sustainability 2

Organizer: Faye Duchin Chair: Sangwon Suh (University of California at Santa Barbara)

Charles Vörösmarty (City University of New York) and Faye Duchin (Rensselaer Polytechnic Institute, Troy) Input-Output Models of the Economy: Quantifying the Role of Earth System Dynamics and Ecosystem Services

Ignacio Cazcarro (Rensselaer Polytechnic Institute, Troy) and Faye Duchin (Rensselaer Polytechnic Institute, Troy) *The Global Economic and Ecological Impacts of Fish vs. Livestock as the Dietary Source of Animal Protein: A Scenario Analysis*

Faye Duchin (Rensselaer Polytechnic Institute, Troy) and Stephen H. Levine (Tufts University, Medford) Payment Flow Networks in Multiregional Economic Systems

16.30 - 18.00 Room 11Parallel Session 6b: Special Session on "Regions Going Global"Organizer: Erik DietzenbacherChair: Silvio Ichihara (Secretary of Transport- State of Sâo Paulo)

Bart Los (University of Groningen) and Luca Cherubini (Banca d'Italia, Firenze) Regional Employment Patterns in a Globalizing World: A Tale of Four Italies

Satoshi Inomata (Institute of Developing Economies-JETRO, Chiba) and Bo Meng (Institute of Developing Economies-JETRO, Chiba) *Transnational Interregional Input-Output Tables: An Alternative Approach to MRIO*

Erik Dietzenbacher (University of Groningen), Joaquim Guilhoto (University of Sao Paulo) and Denise Imori (University of Sao Paulo) *The Role of Brazilian Regions in the Global Value Chain*

16.30 - 18.00 Room 32

Parallel Session 6c: Special Session on Disaster Analysis 3

Organizers: Yasuhide Okuyama and Joost Santos

Chair: Joost Santos (George Washington University, Washington DC)

Olaf Jonkeren (European Commission, JRC-IPSC, Ispra) and Georgios Giannopoulos (European Commission, JRC-IPSC, Ispra) *Modelling Critical Infrastructure Resilience with a Dynamic Inoperability Input-Output Model*

Joanna Z. Resurreccion (University of the Philippines Diliman, Quezon City), Joost R. Santos (George Washington University, Washington DC) and Johan Rene Van Dorp (George Washington University, Washington DC) Uncertainty Analysis of Decision-Maker Preferences: An Input-Output-Based Approach for Prioritizing Critical Interdependent Systems

Raymond R. Tan (De la Salle University, Manila), Kathleen B. Aviso (De la Salle University, Manila), Michael B. Promentilla (De la Salle University, Manila), Krista D. Yu (De la Salle University, Manila) and Joost R. Santos (George Washington University, Washington DC) *A Fuzzy Linear Programming Model for Allocation of Inoperability in Industrial Networks Caused by Loss of Natural Resource Inputs*

16.30 - 18.00 Room 22

Parallel Session 6d: Structural Change 2

Chair: Xu Jian (Chinese Academy of Sciences, Beijing)

Hak K. Pyo (Seoul National University), Keunhee Rhee (Seoul National University) and Sae Rang Song (Seoul National University) *Two Financial Crises and Induced Employment Effect in the Republic of Korea*

Christian Samen Ememen Otchia (Nagoya University) Growth, Diversification and Welfare in the Democratic Republic of Congo: A CGE Analysis

Rajas Parchure (Gokhale Institute of Politics and Economics, Pune) Existence of Equilibrium in a Monetary Economy: An I-O Perspective

16.30 - 18.00 Room 33

Parallel Session 6e: Regional Analyses of Water-Related Problems

Chair: Xiuli Liu (Chinese Academy of Sciences, Beijing)

Zhuoying Zhang (Chinese Academy of Sciences, Beijing), Minjun Shi (Chinese Academy of Sciences, Beijing) and Hong Yang (Swiss Federal Institute of Aquatic Science and Technology, Dübendorf) *Changes in China's Virtual Water Trade Based on an Interregional Input-Output Analysis*

Pongsak Suttinon (Kochi University of Technology), Nattakorn Bongogochgetsakul (Kochi University of Technology), Kotomi Uemoto (Kochi University of Technology), Seigo Nasu (Kochi University of Technology) and Takeo Ihara (Chubu Region Institute for Social and Economic Research, Nagoya)

Water Policy Impacts Evaluation System under Climate Change for River Basin Management: Interregional Input-Output Model

Suparana Katyaini (Indian Institute of Technology, Guwahati), Anamika Barua (Indian Institute of Technology, Guwahati) and Dabo Guan (University of Leeds) Virtual Water Trade Flows for Sustainable Use of Freshwater in India: A Methodological Framework for Sub-national and Policy Relevant Assessment

16.30 - 18.00 Room 21a

Parallel Session 6f: Construction of Interindustry Data

Chair: Sanjiv Mahajan (Office for National Statistics, London)

Alsu Sayapova (Russian Academy of Sciences, Moscow) and Tatyana Tagaeva (Russian Academy of Sciences, Novosibirsk)

Compilation Variants of Symmetric Input-Output Tables and Their Application Areas (the Case of Russia)

Thijs ten Raa (Tilburg University) and José Manuel Rueda-Cantuche (Pablo de Olavide University, Sevilla) The Problem of Negatives in Input-Output Analysis: A Review of the Solutions

Kylia Wall (Australian Bureau of Statistics, Canberra) and Meagan Phelan (Australian Bureau of Statistics, Canberra) Treatment of Margins within the Australian Input-Output Tables

16.30 - 18.00 Room 21b
Parallel Session 6g: Special Session on Pioneers of Input-Output
Organizer: Christian Bidard
Chair: Christian Bidard (University Paris-Ouest, Nanterre)

Albert Steenge (University of Groningen) and Richard van den Berg (Kingston University, London) Tableaux and Systèmes: Early French Contributions to Linear Production Models

Kenji Mori (Tohoku University, Sendai) Georg Von Charasoff and the Anticipation of Von Mises Iteration

Christian Bidard (University Paris-Ouest, Nanterre) IO as a Tool for a Christian Order: Maurice Potron, Jesuit and Pioneer

9.00 Main Hall

Flash Session 3 (Program to be announced)

9.45 Main Hall

Keynote Lecture 3 (Chair: Kazuhiko Nishimura, Nihon Fukushi University, Mihama) Masahiro Kuroda (Japan Science and Technology Agency, Tokyo): *Future Challenges on Input-Output Analysis - How to Assess Impacts of R&D Investment on Productivity Gains?*

10.30 **Coffee Break**

11.00

Parallel Sessions 7

7a: Special Session on Input-Output Economics and Waste Management (International Conference Room)

7b: Analysis of Disasters in an IO Framework (Room 11)

7c: International Trade and the Environment 4 (Room 32)

7d: International Trade 1 (Room 22)

7e: Studies on Prices (Room 33)

7f: Special Session on Uses of Bayesian and Entropy Techniques in IO (Room 21a)

7g: Input-Output and Demographic Change (Room 21b)

13.00 Lunch (1F: Event Hall)

14.00 **Excursion**

18.00 End of Excursion

19.00 Conference Dinner (Rihga Royal Hotel Kokura: 4F)

11.00 – 13.00 International Conference Room
Parallel Session 7a: Special Session on Input-Output Economics and Waste
Management
Organizer: Yasushi Kondo
Chair: Fave Duchin (Rensselaer Polytechnic Institute)

Christian John Reynolds (University of South Australia, Adelaide) and John Boland (University of South Australia, Adelaide) *Waste Not, Want Not? The Economics of Waste and the Good of Charity in a WIO Framework*

Koji Takase (Shizuoka University) and Yasushi Kondo (Waseda University, Tokyo) An Analysis of Consumer Behavior Including Waste Discharge and Time-use

Chen Lin (Shandong University, Jinan), Makiko Tsukui (Tokyo International University), Kaiyan Ji (Shandong University, Jinan) and Xiaoliang Lang (Shandong University, Jinan) *How Do the Waste Treatment Scenarios Affect the Environment Impact of Commute Approaches in China? An Application Based on the Waste Input-Output Table of China*

Makiko Tsukui (Tokyo International University), Shigemi Kagawa (Kyushu University, Fukuoka), Ryoji Hasegawa (Osaka International University) and Yasushi Kondo (Waseda University, Tokyo)

Repercussion Effects of Final Consumption on Production and Environmental Loads in the 47 Prefectures of Japan: Multi-regional Waste Input–Output Approach

11.00 - 13.00 Room 11

Parallel Session 7b: Analysis of Disasters in an IO Framework Chair: Raymond R. Tan (De la Salle University, Manila)

Kazushige Shimpo (Keio University, Tokyo), Koichi Hikita (Kobe Shukugawa Gakuin University) and Toshifumi Unno (Keio University, Tokyo) Visualizing Economic Vulnerability to Disaster: The Case of 2011 Tohoku Earthquake and Tsunami in Japan

Hiroyuki Shibusawa (Toyohashi University of Technology), Nian Li (Toyohashi University of Technology) and Koichiro Nakazawa (Toyohashi University of Technology) Economic Assessment of Natural Disasters in China: A Spatial CGE Approach

Jidong Wu (Beijing Normal University), Ning Li (Beijing Normal University) and Wei Xie (Beijing Normal University) *Physical Damage and Economic Consequences of Climate Change on the Coastal City Areas of Shanghai, China*

Gabriele Oliva (University Campus BioMedico, Roma), Olaf Jonkeren (European Commission, JRC-IPSC, Ispra), Roberto Setola (University Campus BioMedico, Roma) and David Ward (Milano) *Validation of an Experience-Based Inoperability Input-Output Model*

11.00 – 13.00 Room 32 **Parallel Session 7c: International Trade and the Environment 4** Chair: Robbie Andrew (CICERO, Oslo)

Konstantin Stadler (Norwegian University of Science and Technology, Trondheim), Kjartan Steen-Olsen (Norwegian University of Science and Technology, Trondheim) and Richard Wood (Norwegian University of Science and Technology, Trondheim) *The Other 10% - The Contribution of Minor Developing Nations to the Environmental Footprint of Trade: Analysis of MRIO Results and Methods to Complete Estimates of the Global Economy*

Arnold Tukker (Netherlands Organization for Applied Scientific Research TNO, Delft), Arjan de Koning (Leiden University), Richard Wood (Norwegian University of Science and Technology, Trondheim), Stephan Moll (European Commission, Eurostat, Luxemburg) and Maaike C. Bouwmeester (University of Groningen) *The Price Corrected Domestic Technology Assumption – A Method to Assess Pollution Embodied in Trade Using Primary Official Statistics Only*

Yan Xu (University of Groningen), Erik Dietzenbacher (University of Groningen) and Bart Los (University of Groningen) International Trade and Net Damages of Air Pollution in the United States

Sangwon Suh (University of California at Santa Barbara) Environmental Impact of Trade: A Critical Appraisal

11.00 - 13.00 Room 22

Parallel Session 7d: International Trade 1

Chair: Robert Stehrer (Vienna Institute for International Economic Studies WIIW)

K. Ali Akkemik (Kadir Has University, Istanbul) and Utku Oren (Kadir Has University, Istanbul) CGE Assessment of the Korea-Turkey Free Trade Agreement

Hu Bin (Chinese Academy of Sciences) and Xu Jian (Chinese Academy of Sciences) What Would Be the Impact If the Trade Relation between China and Japan Is Cut Off?

Yu Feng (University of Michigan, Ann Arbor), Sai Liang (University of Michigan, Ann Arbor) and Ming Xu (University of Michigan, Ann Arbor) *The Structure of the Global Trade Network*

Ingue Lee (Bank of Korea, Seoul) and Youngjin Lim (Bank of Korea, Seoul) Factor Decomposition of the Differences in Domestic Value Added Effects between Korea and Japan Using WIOD Tables

11.00 – 13.00 Room 33Parallel Session 7e: Studies on PricesChair: Moslem Bemanpoor (University of Tehran)

Shih-Mo Lin (Chung Yuan Christian University, Taiwan), Jingyu Liu (Chinese Academy of Sciences, Beijing), Jin-Xu Lin (Chung Yuan Christian University, Taiwan), Chun-Chiang Feng (National Central University, Taiwan), Yan Xia (Chinese Academy of Sciences, Beijing) and Pei-Ling Wen (Chung Yuan Christian University, Taiwan) *Transmission Paths of Oil Shocks in Taiwan and Mainland China – A Financial Social Accounting Matrix Analysis*

Yuko Oshita (Kyushu University, Fukuoka) Finding Important Industrial Clusters with Higher Oil Price Pressure: Japan's Case

Akiko Nakajima (University of Fukuoka) Natural Prices Versus Market Prices: Input-Output Analysis of Japan for 1951-2000

11.00 - 13.00 Room 21a

Parallel Session 7f: Special Session on Uses of Bayesian and Entropy Techniques in IO Organizers: Esteban Fernandez Vazquez and Umed Temurshoev Chair: Esteban Fernandez Vazquez (University of Oviedo)

Joao Rodrigues (Instituto Superior Técnico, Lisbon) The Prior Uncertainty of Input-Output Data

Oleg Lugovoy (Russian Presidential Academy of National Economy and Public Administration, Moscow), Andrey Polbin (Russian Presidential Academy of National Economy and Public Administration, Moscow) and Vladimir Potashnikov (Russian Presidential Academy of National Economy and Public Administration, Moscow) *Bayesian Estimation of Input-Output Tables for Russia*

Esteban Fernandez Vazquez (University of Oviedo) Estimating Multiplier Matrices by Entropy Econometrics

Joao Rodrigues (Instituto Superior Técnico, Lisbon) Data Reconciliation in Input-Output Analysis

11.00 – 13.00 Room 21b **Parallel Session 7g: Input-Output and Demographic Change** Chair: Bart Los (University of Groningen)

Giorgio Garau (University of Sassari), Patrizio Lecca (University of Strathclyde) and Giovanni Mandras (University of Cagliari) *How does Ageing Population Affect Energy Use? An OLG-GE Application for Italy*

Quanrun Chen (Chinese Academy of Sciences, Beijing), Erik Dietzenbacher (University of Groningen) and Bart Los (University of Groningen) China's Household Consumption Structural Change under the Ageing and Urbanization Process and Its Impact on Sectoral Employment

Hongfu Ni (Beijing Research Center for Science of Science), Shantong Li (Development Research Center of the State Council, Beijing), Jianwu He (Development Research Center of the State Council, Beijing) and Shiyun Zhang (Beijing Research Center for Science of Science)

Study of Relationship between Demographic Change and Economic Structure in China Based on Input Output Analysis

Hui Li (Chinese Academy of Sciences, Beijing) and Xikang Chen (Chinese Academy of Sciences, Beijing) China's Total Population and Population Structure Predictions Based on Demographic Input-Output Model

9.00 Main Hall General Assembly of the International Input-Output Association

10.30 **Coffee Break**

11.00

Parallel Sessions 8

8a: Special Session on Disaster Analysis 4 (International Conference Room)

8b: International Trade 2 (Room 11)

8c: IDE Special Session on Global Value Chains 4 (Room 32)

8d: Environmental Analysis for Regions (Room 22)

8e: International Trade and the Environment 5 (Room 33)

8f: Construction of Interindustry Accounts (Room 21a)

13.00 Lunch (1F: Event Hall)

14.00

Parallel Sessions 9

9a: Special Session on Disaster Analysis 5 (International Conference Room)

9b: Special Session on IO and Transportation Studies (Room 11)

9c: Special Session on Material Flow Analysis (Room 32)

9d: Special Session on Input-Output and Technical Change (Room 22)

9e: Special Session on the Use of National and Consolidated SUTs and IOTs 2 (Room 33)

9f: Income Distribution (Room 21a)

9g: Impacts of Industries (Room 21b)

15.30 Coffee Break

16.00 Main Hall Announcement of the Winner(s) of the Richard Stone Memorial Prize

16.15 Main Hall Leontief Memorial Prize Session

17.00 Main HallKeynote Lecture 4 (Chair: Sangwon Suh, University of California, Santa Barbara)Glen P. Peters (CICERO, Oslo): From Quantification to Implementation: Is There a Role for Consumption-Based Policy Instruments in Climate Policy?

17.45 Main Hall Concluding Remarks

18.00 End of Conference

11.00 – 13.00 International Conference Room
Parallel Session 8a: Special Session on Disaster Analysis 4
Organizers: Yasuhide Okuyama and Joost Santos
Chair: Yasuhide Okuyama (University of Kitakyushu)

Michiya Nozaki (University of Groningen) How to Examine the Total Economic Impact, Stemmed from the East Japan Great Earthquake: Within the Interregional Input-Output Framework

Satoshi Tsuchiya (Tottori University), Yuya Kitano (Tottori University), Keishi Tanimoto (Tottori University) and Hirokazu Tatano (Kyoto University) *Global Economic Impact Analysis due to Malfunction of International Ports: Spatial Computable General Equilibrium Approach*

Ning Li (Beijing Normal University), Wei Xie (Beijing Normal University) and Jidong Wu (Beijing Normal University) Analyzing Regional Economic Impacts of Electricity Outages from the Great 2008 Chinese Ice Storm Based on Computable General Equilibrium Model

Kazuyoshi Nakano (CRIEPI, Tokyo), Yoshio Kajitani (CRIEPI, Tokyo) and Hirokazu Tatano (Kyoto University) Modeling Recovery Process of Regional Economy after a Disaster for Consistent Measurement of Overall Economic Loss

11.00 – 13.00 Room 11Parallel Session 8b: International Trade 2Chair: K. Ali Akkemik (Kadir Has University, Istanbul)

Hongsheng Zhang (Zhejiang University, Hangzhou), Shuzhong Ma (Zhejiang University, Hangzhou) and Bo Meng (Institute of Developing Economies-JETRO, Chiba) The Determinants of the U.S.-China Trade Balance: An Empirical Study Using the International Input-Output Based Measure of "Trade in Value-Added"

Juan Carlos Castillo (University of Maastricht) and Gaaitzen de Vries (University of Groningen) The Domestic Content of Mexico's Maquiladora Exports

Paul J.J. Veenendaal (CPB Netherlands Bureau for Economic Policy Analysis, The Hague) *Trade Redirection in Global Value Chains*

Hongxia Zhang (Renmin University of China, Beijing), Jian Gong (Renmin University of China, Beijing) and Tian Liu (Renmin University of China, Beijing) The Method to Account for the Factor Content or Value Added Embodied in Trade Flows Based on International Input-Output Model

11.00 – 13.00 Room 32

Parallel Session 8c: IDE Special Session on Global Value Chains 4

Organizer: Satoshi Inomata

Chair: Jan Oosterhaven (University of Groningen)

Kiyotaka Sato (Yokohama National University) and Nagendra Shrestha (Yokohama National University) Shock Transmission, Production Fragmentation and Business Cycle Synchronization: New Evidence from Globally Integrated Input-Output Table

Xikang Chen (Chinese Academy of Sciences, Beijing), Cuihong Yang (Chinese Academy of Sciences, Beijing), Zhu Kunfu (Chinese Academy of Sciences, Beijing) and Yuwan Duan (Chinese Academy of Sciences, Beijing) DPN Model and Value Added in Trade: The Study for China

Masaaki Kuboniwa (Hitotsubashi University, Tokyo) Russia's International Input-Output Relations

Bo Meng (Institute for Developing Economies-JETRO, Chiba), Zhi Wang (US International Trade Commission, Washington DC) and Robert B. Koopman (US International Trade Commission, Washington DC) How are Global Value Chains Fragmented and Extended in China's Domestic Production Networks?

11.00 – 13.00 Room 22

Parallel Session 8d: Environmental Analysis for Regions Chair: Monica Serrano (University of Barcelona)

Ignacio Cazcarro (Rensselaer Polytechnic Institute, Troy), Rosa Duarte (University of Zaragoza) and Julio Sánchez Chóliz (University of Zaragoza) Downscaling the Grey Water Footprints of Production and Consumption of the Spanish Regions

Kuishuang Feng (University of Maryland, College Park), Steven J Davis (University of California at Irvine), Xin Li (University of Leeds) and Dabo Guan (University of Cambridge) *Outsourcing CO₂ within China*

Ryohei Nakamura (Okayama University) and Akira Matsumoto (EX Research Institute, Tokyo)

A New Approach to the Correction of Interregional Income Disparity by Extended Interregional IO Table: Trading Wood Biomass Energy and CO2 Credit

Ricardo Luis Lopes (State University of Maringa) and Joaquim J.M. Guilhoto (University of São Paulo)

Decomposition Analysis of CO2 Emissions in Brazilian Economy: Renewable and Nonrenewable Energies Sources Contributions

11.00 - 13.00 Room 33

Parallel Session 8e: International Trade and the Environment 5

Chair: Arnold Tukker (Netherlands Organization for Applied Scientific Research TNO, Delft)

Nina Eisenmenger (Alpen Adria University, Klagenfurt), Dominik Wiedenhofer (Alpen Adria University, Klagenfurt),, Anke Schaffartzik (Alpen Adria University, Klagenfurt), Fridolin Krausmann (Alpen Adria University, Klagenfurt), Stefan Giljum (SERI, Vienna), Martin Bruckner (SERI, Vienna), Barbara Lugschitz (SERI, Vienna), Thomas Wiedmann (University of New South Wales, Sydney) and Manfred Lenzen (University of Sydney) *The Raw Material Consumption of Austria. Five Methods, Five Results*

Yosuke Shigetomi (Kyoto University), Keisuke Nansai (National Institute for Environmental Studies, Tsukuba) and Susumu Tohno (Kyoto University) Future Projection of Global Greenhouse Gas Emissions Associated with Japanese Household Consumption with a Global Link Input–Output Model

Marco Springmann (University of Oldenburg) Addressing Emissions Transfers: the Economic Effects of Combining Consumption-Based Adjustments of Emissions Targets with Clean-Development Investments

Bryn Stott (Institute for Global Environmental Strategies, Hayama) and Xin Zhou (Institute for Global Environmental Strategies, Hayama) *An Impact Assessment of China's Renewable Energy and Efficiency Targets using Multiregion Input-Output Analysis*

11.00 – 13.00 Room 21a **Parallel Session 8f: Construction of Interindustry Accounts** Chair: Thijs ten Raa (Tilburg University)

Natalia Ustinova (Federal State Statistics Service of the Russian Federation, Moscow) and Irina Masakova (State Committee for Statistics of Russia, Moscow) Compilation of the Intermediate Consumption of the Supply and Use Table Based on the Input-Output Survey for 2011: Russian Experience

Bart Van den Cruyce (Belgian Federal Planning Bureau, Brussels) Estimating Interregional Trade Flows Using VAT Data, Some First Results for Belgium

Rolando Gonzales Martinez (Unit of Political, Social and Economic Analysis of Bolivia, La Paz) Balancing Social Accounting Matrices with Artificial Polymorphous Ants

Baoline Chen (Bureau of Economic Analysis, Washington DC), Tommaso Di Fonzo (ISTAT/University of Padova) and Marco Marini (International Monetary Fund, Washington DC)

Statistical Procedures for Reconciling Time Series of Large Systems of Accounts Subject to Low-Frequency Benchmarks

14.00 – 15.30 International Conference Room **Parallel Session 9a: Special Session on Disaster Analysis 5** Organizers: Yasuhide Okuyama and Joost Santos Chair: Yoshio Kajitani (Kyoto University)

Kiyoshi Yonemoto (Takasaki City University of Economics) Input-output and Trade Structures of the Regions of Fukushima, Japan: Before and After the Disaster

Attakrit Leckcivilize (London School of Economics and Political Science) The Impact of Supply Chain Disruptions: Evidence from the Japanese Tsunami

Yasuhide Okuyama (University of Kitakyushu) Issues of Measuring Disaster Impact and Effects

14.00 – 15.30 Room 11
Parallel Session 9b: Special Session on IO and Transportation Studies
Organizer: Michael L. Lahr
Chair: Michael L. Lahr (Rutgers University, New Brunswick)

Silvio M. Ichihara (Secretary of Transport- State of São Paulo), Karin A. Van de Bilt (University of São Paulo) and Joaquim J.M. Guilhoto (University of São Paulo) An Input-Output Matrix and a Four-Step Model: a Synergistic Interaction for Cargo Transportation Forecasting

Gio C. Punsalang (De la Salle University, Manila) and Laurence A. Tan (De la Salle University, Manila) Assessing the Inter-Industrial Linkages and Economic Contribution of the Philippine Transport Industry

Euijune Kim (Seoul National University), Geoffrey J.D. Hewings (University of Illinois, Urbana-Champaign) and Hidayat Amir (Fiscal Policy Office – Ministry of Finance, Jakarta) *Effects of Transportation Investments on Growth and Income Distribution of Indonesia Economy Using a Financial CGE Model*

14.00 – 15.30 Room 32

Parallel Session 9c: Special Session on Material Flow Analysis Organizers: Keisuke Nansai and Shigemi Kagawa Chair: Shigemi Kagawa (Kyushu University)

Hajime Ohno (Tohoku University, Sendai), Kazuyo Matsubae (Tohoku University, Sendai), Kenichi Nakajima (National Institute for Environmental Studies, Tsukuba), Shinichiro Nakamura (Waseda University, Tokyo) and Tetsuya Nagasaka (Tohoku University, Sendai) Input-Output Approach for Development of Appropriate Recycling System of End of Life Vehicles Aimed at Efficient Utilization of Steel Alloying Elements

Kazuyo Matsubae (Tohoku University, Sendai), Kenichi Nakajima (National Institute for Environmental Studies, Tsukuba) and Keisuke Nansai (National Institute for Environmental Studies, Tsukuba)

Resource Logistics Analysis on Phosphorus by Integrated Phosphorus Cycle Input Output Model

Keisuke Nansai (National Institute for Environmental Studies, Tsukuba), Kenichi Nakajima (National Institute for Environmental Studies, Tsukuba), Shigemi Kagawa (Kyushu University), Yasushi Kondo (Waseda University, Tokyo) and Sangwon Suh (University of California at Santa Barbara)

Characterization of Global Flows of Rare Metals and Their Relation to Japan's Economy

14.00 – 15.30 Room 22

Parallel Session 9d: Special Session on Input-Output and Technical Change Organizer: Kazuhiko Nishimura

Chair: Satoshi Nakano (Japan Institute for Labour Policy and Training, Tokyo)

Tsutomu Harada (Kobe University) Multi-sector Induced Innovation Model: Another Use of Input-Output Analysis

Satoshi Nakano (Japan Institute for Labour Policy and Training, Tokyo) and Kazuhiko Nishimura (Nihon Fukushi University, Mihama) Backward and Forward Measurement of Structural Propagation of Innovation

Satoshi Nakano (Japan Institute for Labour Policy and Training, Tokyo) and Kazuhiko Nishimura (Nihon Fukushi University, Mihama) Measurement of Net Innovation in the Input-Output Observations

14.00 – 15.30 Room 33

Parallel Session 9e: Special Session on the Use of National and Consolidated SUTs and IOTs in Europe 2

Organizers: Antonio F. Amores, Isabelle Remond-Tiedrez, Jose Manuel Rueda Cantuche and Silke Stapel-Weber

Chair: Silke Stapel-Weber (European Commission, Eurostat, Luxemburg)

José Manuel Rueda-Cantuche (Pablo de Olavide University, Sevilla), Joerg Beutel (Konstanz University of Applied Sciences), Isabelle Rémond-Tiedrez (European Commission, Eurostat, Luxembourg) and Antonio F. Amores (European Commission, JRC-IPTS, Sevilla) *A Set of Good Practice Guidelines in the Estimation of Use Tables at Basic Prices and Valuation Matrices*

Isabelle Rémond-Tiedrez (European Commission, Eurostat, Luxemburg), José Manuel Rueda-Cantuche (Pablo de Olavide University, Sevilla), Jörg Beutel (Konstanz University of Applied Sciences), Antonio F. Amores (European Commission, JRC-IPTS, Sevilla) and Silke Stapel-Weber (European Commission, Eurostat, Luxemburg) *Consolidated European Supply, Use and Input-Output Tables for 2008 and 2009*

Isabelle Rémond-Tiedrez (European Commission, Eurostat, Luxemburg) and Pille Defense-Palojarv (European Commission, Eurostat, Luxemburg) Conversion of US Supply and Use Tables Using the European Classifications – A First Analysis for the Years 2008 and 2009

14.00 - 15.30 Room 21a

Parallel Session 9f: Income Distribution

Chair: Rita Sharma (Institute of Management Studies, Noida)

Indrajit Bairagya (Institute of Social and Economic Change, Bangalore) Functional Income Distribution to Personal Income Distribution: An Analysis of Impact of Liberalization on Indian Economy

Zafer Barış Gül (Akdeniz University, Antalya), Celal Tasdogan (Gazi University, Ankara) and Selim Cagatay (Akdeniz University, Antalya) Using a Class-Based Social Accounting Matrix to Account for Distributional Impacts of Fiscal Adjustment in Turkey

Mahdi Sadeqi-Shahedani (School of Economic Sciences, Tehran) and Moslem Bemanpoor (University of Tehran) Energy Price Reform in Iran: Is It Equitable in terms of Labor Market Considerations?

14.00 – 15.30 Room 21b **Parallel Session 9g: Impacts of Industries** Chair:

Mikulas Luptacik (University of Economics, Bratislava), Michal Habrman (University of Economics, Bratislava) and Martin Lábaj (University of Economics, Bratislava) *The Importance of Car Industry for the Slovak Economy*

Shunsuke Okamoto (Kyushu University), Shigemi Kagawa (Kyushu University) and Keisuke Nansai (National Institute for Environmental Studies, Tsukuba) Industry Cluster Analysis of Life-Cycle CO2 Emissions from Service Industries

Eriko Ueno (Gakushuin University, Tokyo) Assessing the Economic Impact of Defense Spending during Vietnam War Era on the U.S. Manufacturing Sector