

PROGRAM OF

THE 50TH ANNUAL

NORTH AMERICAN MEETINGS OF THE

REGIONAL SCIENCE ASSOCIATION

INTERNATIONAL

Philadelphia, Pennsylvania

November 20-22, 2003

Hosted by:

University of Pennsylvania
Federal Reserve Bank of Philadelphia

at

The DoubleTree Hotel
Locust at Broad Streets
Philadelphia, Pennsylvania

Local Organizing: Janice Madden, University of Pennsylvania

Program Committee:

Chair, Janice Madden, University of Pennsylvania

Hesham Abdel-Rahman, University of New Orleans, Urban economics

Marlon Boarnet, University of California-Irvine, Transportation

David Boyce, University of Pennsylvania, Transportation

Gerald Carlino, Philadelphia Federal Reserve, Industrial and non-residential location, regional and industrial development

John I. Carruthers, Mundy Associates LLC, Smart growth

Edward Coulson, Pennsylvania State University, Urban and regional macroeconometrics, housing

Steven Craig, University of Houston, Public finance

Ingrid Gould Ellen, New York University, Poverty

Robert Gibbs, U.S. Department of Agriculture, Rural development

Joe Gyourko, University of Pennsylvania, Real Estate, housing and urban

Andrew Haughwout, New York Federal Reserve, Public finance

Geoff Hewings, University of Illinois, Urbana -Champaign, Input-output

Laura Huntoon, University of Arizona,, Migration, population, labor

Maureen Kilkeny, Iowa State University, Urban systems, location-allocation models, rural

Kara Kockelman, University of Texas-Austin, Transportation

Janet Kohlhase, University of Houston, Residential location, firm location, urban economics, housing, environmental issues

Michael Lahr, Rutgers University, Input-output

James P. LeSage, University of Toledo, Spatial econometrics

Bart Los, University of Groningen, Regional productivity and innovation

Alan Murray, Ohio State University, Spatial interaction, GIS, natural resource planning, location modeling, transportation systems, and spatial optimization methods

Yasuhide Okuyama, West Virginia University, economics of disasters

Kathy O'Regan, New York University, Poverty, public and social services

David Plane, University of Arizona, Migration, population, and labor

Peter V. Schaeffer, West Virginia University, Rural development and population

Tony Smith, University of Pennsylvania, Spatial interaction and statistics, GIS

Brigitte Waldorf, University of Arizona, Migration, population and labor

A note about the committee: Everything that is right about the organization of your session is due to the creativity and diligence of the committee members listed above. Due to the requirements of setting a complete program without time conflicts, however, I occasionally was forced to alter a session submitted by committee members. Everything that is wrong about the organization of your session is undoubtedly due to those alterations. Janice Madden, Chair

Special thanks for assistance on preparation of the program....

Teresa Labov

Special thanks for their advice and sympathy to....

David Boyce, University of Pennsylvania

Janet Kohlhase, University of Houston

Maureen Kilkeny, Iowa State University

North American Regional Science Council 2003:

President: Walter Isard, Cornell University

Chair and Councillor-at-Large (2001-2003): Janet Kohlhase, University of Houston

Executive Director: Adrian Esparza, University of Arizona

Councillors-at-Large:

Gerald Carlino, Federal Reserve Bank of Philadelphia (2002-2004)

Judith Stallman, University of Missouri (2002-2004)

William J. Coffey, University of Montreal (2003-2005)

Peter Schaeffer, West Virginia University (2003-2005)

Canadian RSA Councillor:

Mark Brown, Statistics Canada

Mid-Continent RSA Councillor:

Steven Deller, University of Wisconsin

Northeast RSA Councillor:

Manas Chatterji, Binghamton

Southern RSA Councillor:

John Kort, U.S. Bureau of Economic Analysis

Western RSA Councillor:

David Plane, University of Arizona

NARSC Representatives to RSAI:

Brigitte Waldorf, University of Arizona (2001-2003)

Geoffrey J.D. Hewings, University of Illinois (2002-2004)

Jean Claude Thill, University at Buffalo (2003-2005)

RSAI Executive Director:

Graham Clarke, University of Leeds

Thursday, November 20

8:30 AM--4:30 PM

REGISTRATION AND EXHIBITS (Overture)

8:30 AM--10:30 AM

1. Meeting of Journal of Regional Science Board of Associate Editors (by invitation only) (Sonata 1)

10:30 AM--12:15 PM

2. Meeting of NARSC (by invitation only) (Maestro A)

12:30 PM--2:15 PM

3. Congestion Pricing: Details of Demand and Supply (Maestro A)

Chair: Charles Robin Lindsey, University of Alberta

- *Private Trip Demand and Value of Time*, Hisa Morisugi, Tohoku University; Tatsuhiro Kono, Tohoku University; Akio Kishi, Tohoku University
- *Congestion Pricing on an Urban Road Network: A study Using the Dynamic Traffic Simulator METROPOLIS©*, Charles Robin Lindsey, University of Alberta; André de Palma, Université de Cergy-Pontoise; Moez Kilani, Université du Centre, Tunisia
- *Credit-Based Congestion Pricing: A Proposed Policy and the Public's Response*, Kara M Kockelman, University of Texas at Austin; Sukumar Kalmanje, Univ. Texas at Austin
- *Optimal Cordon Pricing in a Non-Monocentric City*, Se-il Mun, Kyoto University

Discussants:

Charles Robin Lindsey, University of Alberta
Hisa Morisugi, Tohoku University
Juan F. Ortega, University of Illinois at Chicago
Eric Pels, Free University Amsterdam

4. Econometric Models (Maestro B)

Chair: Jean H.P. Paelinck, George Mason University

- *Geography and the Cost of Network Infrastructure: The Case of Local Telephone Systems*, K. Mert Cubukcu, The Ohio State University; Jean-Michel Guldmann, The Ohio State University
- *Min-algebraic and Finite Automata Models in Spatial Econometrics.*, Jean H.P. Paelinck, George Mason University
- *Economic Impacts of São Paulo Downtown Rehabilitation: A Simplified Approach with Micro-Foundations*, Ciro Biderman, FGV-EAESP; Bruno Hermann, FAU-USP; Cotelito Fernando, FGV-EAESP

Discussants:

Jean H.P. Paelinck, George Mason University
Ciro Biderman, FGV-EAESP
Ferran Sancho, University Autònoma de Barcelona

5. Urban-Regional Clustering (Sonata 1)

Chair: Oleg Smirnov, University of Illinois, Urbana-Champaign

- *The Aerospace Industry Clusters in California*, Young-Sik Kim, San Diego State University; Sergio J Rey, San Diego State University
- *Urban-Regional Clustering and the United States Mutual Fund Industry*, Jessie P Poon, University at Buffalo-SUNY; Bradly T Eldredge, University at Buffalo-SUNY
- *Spatial Proximity, Functional Closeness and Regional Competitiveness*, Guang Yang, George Mason University

Discussants:

Adelheid Holl, University of Sheffield
Oleg Smirnov, University of Illinois, Urbana-Champaign
Up Lim, The University of Texas at Austin

6. Optimal Policies for the Environment and Natural Resources (Sonata 4)

Chair: John W. Green, U.S. Dept. of Agriculture

- *Time Restrictions in Natural Resource Management: A Dynamic and Stochastic Analysis*, Amit Batabyal, Rochester Institute of Technology; Hamid Beladi, North Dakota State University
- *Harmonization and Environmental Liability under Forum non Conveniens*, Andrew Lawrence Eckert, University of Alberta; Todd Smith, University of Alberta; Henry van Egteren, University of Alberta

- *Rawlsian and Paretian Approaches to Environmental Policymaking in an Expanding European Union*, Nazmiye Balta, University of Illinois, Urbana-Champaign; Kieran P. Donaghy, University of Illinois, Urbana-Champaign
- *An Evaluation of Water Quality Improvement New Technology Based on the Social Environmental System of Lake Basin*, Yoshiro Higano, University of Tsukuba; Takeshi Mizunoya, The Sci. and Tech. Promotion Foundation of Ibaraki; Katsuhiko Sakurai, University of Tsukuba; Shintaro Kobayashi, University of Tsukuba; Susumu Uchida, University of Tsukuba

Discussants:

Yoshiro Higano, University of Tsukuba
 Kieran P. Donaghy, University of Illinois, Urbana-Champaign
 John M Munro, Simon Fraser University
 Ellen Hanak, Public Policy Institute of California

7. Headquarters and Business Service Industries (Aria B)

Chair: Yukako Ono, Federal Reserve Bank of Chicago

- *Spatial Organization of Firms: The Decision to Split Production and Administration*, Yukako Ono, Federal Reserve Bank of Chicago; Kristin Aarland, Brown University; James C Davis, US Census Bureau; John Vernon Henderson, Brown University
- *Knowledge Spillovers vs. Knowledge Sharing: Advertising Agencies in Manhattan*, Mohammad Arzaghi, Brown University
- *Does Headquarter Relocation Matter? An Empirical Investigation of Business Performance after a Relocation.*, John R Lombard, Old Dominion University; Richard Gregory, University of South Carolina-Spartanburg; Bruce Seifert, Old Dominion University

Discussants:

John R Lombard, Old Dominion University
 Yukako Ono, Federal Reserve Bank of Chicago
 James C Davis, US Census Bureau

8. Input-Output Analysis I: Interregional Independence and Trade (Concerto A)

Chair: Joaquim J.M. Guilhoto, University of São Paulo

- *Interdependence among the Brazilian States: An Input-Output Approach*, Fernando Salgueiro Perobelli, Economics USP and UFJF; REAL/UIUC; Eduardo Amaral Haddad, University of São Paulo
- *Input-output Based Methodology for the Estimation of Interregional Trade Matrixes in Portugal*, Ana Lúcia Sargento, Escola Superior de Tecnologia e Gestão; Pedro Nogueira Ramos, Instituto Nacional de Estatística

- *Intercountry-Interindustry Flows Decomposition as a Measure of Economic Integration: The Case of the EC countries, 1980-1991*, Julie Le Gallo, University of Illinois; Chokri Dridi, University of Illinois, Champaign-Urbana; Geoffrey John Dennis Hewings, University of Illinois, Urbana-Champaign
- *Intraregional and Interregional Trade in Regional Commodity Balances*, Bjarne Madsen, AKF; Chris Jensen-Butler, University of St. Andrews

Discussants:

Erik Dietzenbacher, University of Groningen
 Jan Oosterhaven, University of Groningen
 Peter D. Blair, National Academies of Science and Engineering
 Michael L Lahr, Rutgers University

9. Location Modeling I - Coverage (Rhapsody)

Chair: Alan T Murray, The Ohio State University

- *Modeling Coverage and Distance Decay*, Bilal Farhan, Ohio State University; Alan T Murray, The Ohio State University
- *The Minimum Weighted Covering Location Problem with Distance Constraints*, Rongbing Huang, University of Toronto; Oded Berman, University of Toronto
- *A Continuous Location Model with Non-homogeneous and Asymmetric Distances*, Herica Samcjev, University of Mexico; Servio T. Guillen; Eli De la Torre

Discussants:

Michael Pennington Johnson, Carnegie Mellon University
 Changjoo Kim, The Ohio State University
 Alan T Murray, The Ohio State University

10. Migration Destinations (Sonata 3)

Chair: Brigitte S. Waldorf, University of Arizona

- *The Location of New Jersey's Foreign-born Population, 1990-2000: Characteristics of Immigrant Destinations*, Katherine Hempstead, Rutgers University
- *Where Do Migrants Go? An Analysis of Rural and Urban Destined/Originated Migration in Finland in 1996-99*, Satu Nivalainen, Pellervo Economic Research Institute PTT
- *Moving to Nice Weather*, Jordan Rappaport, Federal Reserve Bank of Kansas City
- *Wage, Rent, "Quality of Life" and Migration: A Sequential Decision Model*, Nada Wasi, University of California, San Diego

Discussants:

Thomas Andrew Knapp, The Pennsylvania State University
Brigit E Martin, Colorado State University
David W. Wong, George Mason University
Brigitte S. Waldorf, University of Arizona

11. Papers in Honor of David Boyce I (Aria A)

Chair: Bruce N Janson, University of Colorado at Denver

- *Themes in the Development and Application of Transport Planning Models*, Huw C.W.L. Williams, Cardiff University, UK
- *Combined Travel Forecasting Models: Formulations and Algorithms*, Hillel Bar-Gera, Ben-Gurion University of the Negev, Israel; David Boyce, University of Pennsylvania
- *Combined Travel Demand Model Parameter Estimation*, Xin Tian, Jacobs Civil Inc.; David Boyce, University of Pennsylvania
- *Free Trade and Transportation Infrastructure in Brazil: Towards an Integrated Approach*, Paulo Resende, Fundacao Dom Cabral (Brazil); Joaquim J.M. Guilhoto, University of São Paulo; Geoffrey John Dennis Hewings, University of Illinois, Urbana-Champaign

Discussants:

David M Levinson, University of Minnesota
Hani Mahmassani, University of Maryland
David H. Bernstein, James Madison University
Colin Gannon, Melbourne, Australia

12. Smart Growth I (Minuet)

Chair: William B. Beyers, University of Washington

- *Urban Growth in U.S. Metropolitan Areas: Quantitative Analysis of Urban Form*, Yan Song, University of Maryland; Jungyul Sohn, University of Maryland; Gerrit Knaap, University of Maryland
- *Developable Land Supplies and the Price of Single Family Housing*, Jungyul Sohn, University of Maryland; Yan Song, University of Maryland; Gerrit Knaap, University of Maryland
- *A Question of Scale: Reconciling New Urbanism with Regional Development Theories*, Michael J. Greenwald, University of Wisconsin, Milwaukee
- *Density, Creativity, and Metropolitan Innovation*, Brian Knudsen, Carnegie Mellon University

Discussants:

Naoru Koizumi, University of Pennsylvania
Rayman Mohamed, Cornell University
Richard Voith, Econsult Corporation
William B. Beyers, University of Washington

13. Spatial Statistics/ Econometrics I: Locally Linear Spatial Models (Concerto B)

Chair: Neil Reid, University of Toledo

- *Logistic and Poisson Geographically Weighted Regression with GWR 3.0*, Martin Charlton, University of Newcastle; Stewart Fotheringham, University of Newcastle; Chris Brunsdon, University of Glamorgan
- *Investigating Heterogeneity in Land Price Models Using Geographically Weighted Regression*, Antonio Paez, McMaster University
- *Local versus Global Convergence in the United-States: A Bayesian Spatial Econometrics Approach*, James P LeSage, University of Toledo; Cem Ertur, Université de Bourgogne
- *A Model of Spatial Differentiation with an Aggregate Consumer Representation*, Tiina M Heikkinen, University of Crete

Discussants:

Antonio Paez, McMaster University
James P LeSage, University of Toledo
Stewart Fotheringham, University of Newcastle
Martin Charlton, University of Newcastle

14. Spatial Demography and Employment (Sonata 5)

Chair: Hannu Tervo, University of Jyväskylä

- *Ex Post Facto Analysis: A Method to Evaluate The Population Projections Estimated in 1970 for The 1990 Spatial Structure of The North Central Texas Region in The US*, Robert C Douglas, Rutgers University, Camden; Yumiko Nishikawa, Gakushuin University; Tatsuhiko Kawashima, Gakushuin University
- *Forecasting the Regional Employment for Germany by Means of Neural Networks and Genetic Algorithms*, Roberto Patuelli, University of Bologna, Italy; Simonetta Longhi, Free University Amsterdam; Aura Reggiani, University of Bologna, Italy; Peter Nijkamp, Free University Amsterdam
- *Self-Employment and Business Cycle in Spain*, Emilio Congregado, University of Huelva; Antonio Anibal Golpe, University of Huelva; José María Millán, University of Alicante
- *National and Regional Wage Curves in Japan, 1981-2001*, Jacques Poot, Victoria University of Wellington; Takuya Hiyoshi, University of Tsukuba; Masayuki Doi, University of Tsukuba

Discussants:

Brian Cushing, West Virginia University
Peter V Schaeffer, West Virginia University
Hannu Tervo, University of Jyväskylä
Sari A Pekkala, Government Institute for Economic Research

2:00 PM--2:30 PM

COFFEE BREAK

2:30 PM--4:15 PM

15. Dynamics of Housing Markets and Regional Economies (Minuet)

Chair: Jungyul Sohn, University of Maryland

- *Public Housing and Access to the Jobs in Paris*, Dominique Bouf, University of Lyons, CNRS
- *Housing Decisions in Panama: A Log-Linear Analysis*, Naoru Koizumi, University of Pennsylvania; Philip McCann, University of Reading
- *Traffic Congestion and Spatial Labor Markets*, Jos van Ommeren, Free University; Erik Verhoef, Free University

Discussants:

Pillsung Byun, University of Arizona
Jungyul Sohn, University of Maryland
Tiina M. Heikkinen, University of Crete

16. Policy Options in Regional Growth (Maestro B)

Chair: Jessie P Poon, University at Buffalo-SUNY

- An Exploration into the Effects of Fiscal Variables on Regional Growth, Diego Martinez, centra and University of Jaén
- *Speaking Falsehoods to Power: States' Misguided Use of 'Cost of Doing Business' Studies in Economic Development Policy*, Michael I Luger, University of North Carolina at Chapel Hill; Suho Bae, University of North Carolina at Chapel Hill
- Trade, Regional Growth and Poverty, Eduardo Amaral Haddad, University of São Paulo

Discussants:

Scott Loveridge, Michigan State University
Jessie P Poon, University at Buffalo-SUNY
Joyce Cooper, University of Texas

17. Regional Economic Development (Rhapsody)

Chair: Edward Coulson, The Pennsylvania State University

- *Size Distribution of Establishments in the United States*, Oleg Smirnov, University of Illinois, Urbana-Champaign

- *Understanding Regional Economic Development: What is on the Left Hand Side is Conditional*, Paul Charles Cheshire, London School of Economics; Stefano Magrini, University of Venice
- *Agglomeration Potential: Industry Linkages in the Southern California Economy*, Richard G. Funderburg, II, University of California-Irvine; Marlon G. Boarnet, University of California-Irvine
- *The Economic Consequences of Population and Employment Led Growth*, Harvey S Cutler, Colorado State University; Stephen Davies, Colorado State University

Discussants:

Hiranya K Nath, Sam Houston State University
 Harvey S Cutler, Colorado State University
 Jun Koo, Cleveland State University
 Edward Coulson, The Pennsylvania State University

18. Managing Environmental Problems and Natural Resources (Sonata 4)

Chair: Amit Batabyal, Rochester Institute of Technology

- *Health and Economic Impact of Air Pollution in Jakarta*, Budy P Resosudarmo, The Australian National University; Lucenteza Napitupulu, University of Indonesia
- *Derivation of an Optimal Carbon Tax Rate and its Influence on Industrial Sectors Regarding Global Warming Prevention in China : Aiming the Encouragement of Alternative Energy Industry*, Bin Li, University of Tsukuba; Yoshiro Higano, University of Tsukuba
- *External Threat or Opportunity? Water Marketing and Groundwater Management in Rural California*, Ellen Hanak, Public Policy Institute of California; Caitlin Dyckman, University of California, Berkeley
- *Safeguarding Animal Agriculture: Regionalizing Disease Issues*, John W. Green, U.S. Dept. of Agriculture; Kenneth W. Forsythe, U.S. Department of Agriculture

Discussants:

Andrew Lawrence Eckert, University of Alberta
 Hamid Beladi, North Dakota State University
 Kingsley Haynes, George Mason University
 Judith I Stallmann, University of Missouri

19. Input-Output Analysis II: Multipliers (Concerto A)

Chair: Geoffrey J.D. Hewings, University of Illinois, Urbana-Champaign

- *On the Dynamics of Net versus Gross Multipliers*, Jan Oosterhaven, University of Groningen (The Netherlands)

- *Multipliers in a Closed Economy*, Albert E Steenge, Universiteit Twente
- *Miyazawa meet Christaller: Spatial multipliers within a Triple Decomposition of Input-Output Central Place Systems*, Michael Sonis, Bar Ilan University and University of Illinois; Geoffrey John Dennis Hewings, University of Illinois, Urbana-Champaign
- *Anticipating GDP Using Input-Output Tables*, Sam Cole, University at Buffalo; Yigal Gelb, Columbia University

Discussants:

Sam Cole, University at Buffalo
 John R. Madden, Monash University
 Michael L Lahr, Rutgers University
 Peter Batey, University of Liverpool

20. Papers in Honor of David Boyce II (Aria A)

Chair: Der-Horng Lee, National University of Singapore

- *Multi-Modal Routing and Navigation Cost Functions for Location-Based Services (LBS)*, Tschangho John Kim, University of Illinois, Urbana-Champaign
- *Iteration-free Microassignment*, Michael Wegener, Spiekermann & Wegener (S&W)
- *Cost Minimizing Behavior in Random Discrete Choice Modeling*, Sven Erlander, Linköping University; Jan T. Lundgren, Linköping University
- *Supply Chain Supernetworks with Random Demands*, June Dong, State University of New York at Oswego; Ding Zhang, State University of New York at Oswego; Anna Nagurney, University of Massachusetts

Discussants:

Peter C. Nelson, University of Illinois at Chicago
 Xin Tian, Jacobs Civil Inc.
 Huw C.W.L. Williams, Cardiff University, UK
 Justin Siegel, MCT, Ltda., Santiago, Chile

21. Creation and Diffusion of Innovations: Spatial Issues (Sonata 3)

Chair: Bart Los, University of Groningen/GGDC

- *The Regional Diffusion of the Steam Engine in Britain in the Eighteenth Century*, Alessandro Nuvolari, Eindhoven University of Technology; Nick von Tunzelmann, SPRU, University of Sussex
- *Survival Analysis of a New Technology During a Process of Diffusion: Temporal & Spatial Aspects*, Nilotpal Das, University of Delaware
- *Do Vertical Production Networks Exhibit Network Externalities?: Evidence from the Japanese Automobile Industry*, Abdel Musik Guillermo, ITAM

- *Cluster Dynamics: New Evidence and Projections for Computing Services in Great Britain*, Bernard Fingleton, Cambridge University; Danilo Camargo Iglori, Cambridge University; Barry Moore, Cambridge University

Discussants:

Olivier Parent, University of Saint-Etienne
 Bart Verspagen, Eindhoven University of Technology
 Attila Varga, University of Pecs
 Daniel Felsenstein, Hebrew University of Jerusalem

22. Rural Development Issues (Maestro A)

Chair: Maureen Kilkenny, Iowa State University

- *Management Systems in Rural Manufacturing*, Timothy R. Wojan, US Department of Agriculture
- *Changes in Rural Versus Urban Manufacturing Employment: A Shift and Share Analysis on French Data*, Carl Gaigne, CORE, CERAS and CPER; Virginie Piguet, INRA-ESR, CESAER; Bertrand Schmitt, INRA-ESR, CESAER
- *Visualizing Brazilian Quality of Life and Human Development -- A Cartographic Analysis*, Joao Francisco Abreu, Catholic University of Minas Gerais-Brazil
- *Is the "New Economy" Benefitting Rural Places? A Model of Employment and Earnings Growth in High Tech Manufacturing Industries*, Martin Shields, The Pennsylvania State University; Carolina Vivanco, The Pennsylvania State University

Discussants:

Bertrand Schmitt, INRA-ESR, CESAER
 Maureen Kilkenny, Iowa State University
 J.W. Harrington, Jr., University of Washington
 Katherine C Chalmers, Bowling Green State University

23. Spatial Statistics/ Econometrics II: Spatial Methods Applied to Urban/Regional Data and Policy (Concerto B)

Chair: James P LeSage, University of Toledo

- *Spatial Modeling of Urban Housing Values: The Case of the Agglomeration of Dijon*, Catherine Baumont, Université de Bourgogne; Yves Aragon, Université de Toulouse; Inès Heba, Université de Toulouse; Christine Thomas-Agnan, Université de Toulouse
- *The Northwest Ohio Industrial Cluster Study*, Neil Reid, University of Toledo; Michael C Carroll, Bowling Green State University
- *Estimation and Inference in Spatial Hedonic Models: An Assessment of Methodological Issues*, Luc Anselin, University of Illinois, Urbana-Champaign; Julie Le Gallo, University of Illinois Urbana-Champaign; James C Murdoch, University of Texas at Dallas; Mark Thayer, San Diego State University
- *Spatial Patterns of Unemployment in Poland*, Maria Plotnikova, University of

Illinois at Urbana-Champaign; Chokri Dridi, University of Illinois, Champaign-Urbana; Julie Le Gallo, University of Illinois , Urbana-Champaign

Discussants:

Neil Reid, University of Toledo
Julie Le Gallo, University of Illinois, Urbana-Champaign
Tony E Smith, University of Pennsylvania
Cem Ertur, Université de Bourgogne

24. Urban Economics: Labor Market (Aria B)

Chair: Jacques-Francois Thisse, CORE, CERAS and CPER

- *Spatial Wage Disparities: Sorting Matters*, Gilles Duranton, London School of Economics; Pierre-Philippe Combes, CERAS and Boston University; Laurent Gobillon, UCL
- *An Economic Theory of Criminal Deterrence*, Robert M. Hunt, Philadelphia Federal Reserve
- *Agglomeration, Opportunism, and the Organization of Production*, Robert Helsley, University of British Columbia; William Strange, University of Toronto

Discussants:

Gianmarco Ottaviano, Università di Bologna and CEPR
Gilles Duranton, London School of Economics
Jacques-Francois Thisse, CORE, CERAS and CPER

25. Evaluation of Urban and Regional Planning Strategies (Sonata 5)

Chair: Antonio M Bento, University of California, Santa Barbara

- *Four Decades of Regional Studies and Planning in Quebec: A Reevaluation*, Danielle S Lafontaine, Université du Québec à Rimouski
- *Fifty Years of Regional Strategies in Quebec*, Proulx Marc Urbain, University of Quebec at Chicoutimi
- *Managing Growth in Vancouver: Approaches and Outcomes*, John M Munro, Simon Fraser University

Discussants:

Mark Brown, Statistics Canada
John I. Carruthers, Mundy Associates LLC
Antonio M Bento, University of California, Santa Barbara

26. Contributions to International Spatial Issues (Sonata 1)

Chair: Samia Islam, West Virginia University

- *An Empirical Analysis of the Geographic Distribution and Agglomeration of Japanese Manufacturing Industry in Japan*, Suminori Tokunaga, University of Tsukuba; Yuko Akune, Nagoya City University

- *Mexico's Cold: the Export Processing Industry and the US Recession*, Becky Zerlentes, Front Range Community College
- *Factor Content of Trade: Efficiencies of Labor and Capital Use in Bangladesh's Export and Import in the Changing Global Economy*, Mohammed Salimullah, Bangladesh Institute of Development Studies
- *Airline Network Structures under Alliances and Open Skies -- The Case of the US and Europe*, Aisling J Reynolds-Feighan, University College Dublin, Ireland

Discussants:

Adelheid Holl, University of Sheffield
 Tomokazu Arita, University of Tsukuba
 Fernando Salgueiro Perobelli, Economics USP and UFJF; REAL/UIUC
 Samia Islam, West Virginia University

4:00 PM--4:45 PM

Buses Leave For Philadelphia Federal Reserve Bank, 6th and Arch Streets, enter at 6th Street Side

Security screens at the Federal Reserve Bank require that attendees arrive at least a half hour before the talk. Last minute arrivals cannot be accommodated.

5:00 PM--6:00 PM

27. Philadelphia Federal Reserve Keynote Address

- *A Search for Multiple Equilibria in Urban Industrial Structure: Evidence from the Strategic Bombing of Japan*, David Weinstein, Columbia University

Discussants:

John Vernon Henderson, Brown University
 Masahisa Fujita, Kyoto University

6:00 PM--7:30 PM

28. Reception at the Philadelphia Federal Reserve Bank

6:45 PM--7:45 PM

Buses leave Philadelphia Federal Reserve Bank for DoubleTree Hotel

7:30 PM--10:00 PM

29. Executive Council Meeting of the Southern Regional Science Association (by invitation only). (Aria B)

Chair: Stephen M. Smith, The Pennsylvania State University

Friday, November 21

8:00 AM--6:00 PM

REGISTRATION AND EXHIBITS (Overture)

8:00 AM--9:45 AM

30. Agglomeration Economies and Regional Growth (Sonata 1)

Chair: Gerald Carlino, Federal Reserve Bank of Philadelphia

- *Knowledge Spillovers, Agglomeration Economies, and Regional Economic Growth in the U.S. Metropolitan Areas*, Up Lim, The University of Texas at Austin
- *Determinants of Localized Technology Spillovers: A New Approach for an Old Issue*, Jun Koo, Cleveland State University
- *Renewing Provincial Manufacturing Economies in Canada, 1973-1996*, Mark Brown, Statistics Canada
- *Product and Process Innovation in Regional Dynamics: A Growth Model*, Claudia Werker, Eindhoven University of Technology/ECIS; Bart Verspagen, ECIS/Eindhoven University of Technology

Discussants:

Gerald Carlino, Federal Reserve Bank of Philadelphia
John E. Bodenman, Bloomsburg University
Rachel S. Franklin, US Census Bureau
Esteban Fernandez, University of Oviedo

31. Input-Output Analysis III: New Issues and Techniques (Concerto A)

Chair: Michael Sonis, Bar Ilan University and University of Illinois

- *A Statistical Model for the Identification of Key Sectors in an Input-Output Model*, Marco Percoco, Universita Luigi Bocconi; Lanfranco Senn, Universita Luigi Bocconi
- *Issues in Nonlinear Input-Output Modeling*, Guy R West, The University of Queensland; Randall W Jackson, West Virginia University
- *Supply Constraints and Mixed Multipliers in Input-Output Models of Animal Disease*, Karl Rich, University of Illinois
- *Sensitivity of Simulation Results to Competing SAM Updates*, Manuel Alejandro Cardenete, University Pablo de Olavide; Ferran Sancho, University Autonoma de Barcelona

Discussants:

Manuel Alejandro Cardenete, University Pablo de Olavide

Erik Dietzenbacher, University of Groningen
Bernadette Andreosso-O'Callaghan, University of Limerick
Guy R West, The University of Queensland

32. Location Modeling II (Rhapsody)

Chair: M John Hodgson, The University of Alberta

- *Geocoding Accuracy and Its Impact on Location Modeling and Planning: A Review of the Critical Issues*, Tony H Grubestic, University of Cincinnati; Alan T Murray, The Ohio State University
- *Finding Data Envelopment Analysis (DEA) Efficient Location Patterns*, Ronald Klimberg, St. Josephs University; Samuel J Ratick, Clark University
- *Cell Tower Location Using Spatial Interpolation*, Mohan Akella, University at Buffalo (SUNY); Rajan Batta, University at Buffalo (SUNY); Eric Delmelle, University at Buffalo (SUNY); Peter Rogerson, University at Buffalo (SUNY)
- *Location Approaches to the Placement of Stream Monitoring Stations*, Charles S ReVelle, Johns Hopkins University

Discussants:

Peter Rogerson, University at Buffalo (SUNY)
Yuri A. Yegorov, Institute for Advanced Studies
Tony H Grubestic, University of Cincinnati
Changshan Wu, University of Wisconsin, Milwaukee

33. Migration: Personal and Place Attributes (Sonata 5)

Chair: Dan S. Rickman, Oklahoma State University

- *Who Migrates Between Provinces in Canada? An Exploratory Analysis Based on a Longitudinal Survey*, Denis Gonthier, Statistics Canada; Jacques Ledent, INRS Urbanisation, Culture et Société
- *Studying U.S. Internal Migration by Multilevel Modeling*, Edmund J. Zolnik, Binghamton University
- *Where Do the Highly Educated Migrate? Micro-level Evidence from Finland*, Mika Haapanen, University of Jyväskylä; Jari Ritsilä, University of Jyväskylä

Discussants:

Satu Nivalainen, Pellervo Economic Research Institute PTT
Jordan Rappaport, Federal Reserve Bank of Kansas City
Robert Morris Gibbs, US Department of Agriculture

34. Papers in Honor of David Boyce III (Aria A)

Chair: Michael Wegener, Spiekermann & Wegener (S&W)

- *Planning Transport Network Improvements Over Time*, Hong K. Lo, Hong Kong University of Science and Technology; W. Y. Szeto, Hong Kong University of Science and Technology

- *An Efficient Path-Based Algorithm for a Dynamic User Equilibrium Problem*, Huey-Kuo Chen, National Central University, Taiwan; Hsiao-Chi Peng, National Central University, Taiwan; Cheng-Yi Chou, National Central University, Taiwan
- *Estimating Link Delays for Arterial Streets*, Elliott A. Torres, Borland Software Corporation; Peter C. Nelson, University of Illinois at Chicago; Nagui M. Rouphail, North Carolina State University; Joseph Raj, Oracle Corporation
- *Modeling Travel Times along Signalized Streets Using Expected Cumulative Counts*, Andrzej P. Tarko, Purdue University

Discussants:

Se-il Mun, Kyoto University
 Thanasis K Ziliaskopoulos, Northwestern University
 Andrzej P. Tarko, Purdue University
 Shahram Bohluli, North Central Texas Council of Governments

35. Regional Economic Effects of Disasters I (Sonata 4)

Chair: Yasuhide Okuyama, West Virginia University

- *Business Vulnerability to Transportation Disruption in Earthquake Disasters*, William B. Beyers, University of Washington; Stephanie E. Chang, University of Washington
- *Estimation of Economic Resiliency of Industrial Sectors against a Large Scale Disaster -- A Case Study of Hyogoken-Nanbu Earthquake*, Yoshio Kajitani, Central Research Inst. of Electric Power Industry; Norihiko Yamano, CRIEPI; Yoshiharu Shumuta, CRIEPI
- *Agglomeration, Major Risky Accidents and Environmental Policy*, Marie-Francoise Calmette, Toulouse University; Isabelle Pechoux, Toulouse University
- *Economics of Natural Disasters: A Critical Review*, Yasuhide Okuyama, West Virginia University

Discussants:

Yoshio Kajitani, Central Research Inst. of Electric Power Industry
 Adam Rose, The Pennsylvania State University
 Marie-Francoise Calmette, Toulouse University
 Nazmiye Balta, University of Illinois. Urbana-Champaign

36. Rural Development: Rural Tourism and Agriculture (Maestro A)

Chair: Peter V Schaeffer, West Virginia University

- *Benefits from International Trade: A Northeast Producer Perspective*, Edmund M Tavernier, Rutgers University
- *Does Tourism and Seasonal Home Ownership lead to Permanent Migration to Recreational Communities in the Ozarks*, Sonya M Glavac, USGS

- *Examining the Impact of Tourism on the Distribution of Income in West Virginia with a Social Accounting Matrix*, David W. Hughes, West Virginia University
- *A Quantitative Assessment of Impact of Michigan's Economic Development Policies on Personal Income Growth*, Denys Nizalov, Michigan State University; Scott Loveridge, Michigan State University

Discussants:

Victoria Burke, University of Kentucky
 Judith I Stallmann, University of Missouri
 Peter V Schaeffer, West Virginia University
 Sonya M Glavac, USGS

37. Smart Growth II (Minuet)

Chair: Thomas Reiner, University of Pennsylvania

- *Dividing Lines and Bottom Lines: The Forces Shaping Local Land Use*, John Thomas, Florida State University
- *Effects of Local Growth Controls in California: A Spatial Econometric Analysis of Housing Supply Controls*, Pillsung Byun, University of Arizona; Raymond Florax, Free University; Brigitte S. Waldorf, University of Arizona
- *Location and Welfare within Cities: Estimating the Impacts of Intra-urban Location Choices*, Somik V Lall, The World Bank

Discussants:

Thomas Reiner, University of Pennsylvania
 John I. Carruthers, Mundy Associates LLC
 Gerrit Knaap, University of Maryland

38. Spatial Statistics/ Econometrics III: Spatial Methods Applied to Regional Convergence Issues (Concerto B)

Chair: Tony E Smith, University of Pennsylvania

- *Regional Disparities in the European Union and the Enlargement Process: An Exploratory Spatial Data Analysis, 1995-2000*, Cem Ertur, Université de Bourgogne; Wilfried Koch, Université de Bourgogne
- *On the Evolution of Regional Productivity Disparities in the European Union, 1975-2000*, Yiannis Kamarianakis, Institute of Applied and Computational Mathematics; Julie Le Gallo, University of Illinois Urbana-Champaign; Suahazil Nazara, Regional Economics Applications Laboratory
- *Spatial Econometrics of the European Regional Convergence Process Over 1980-1999*, Julie Le Gallo, University of Illinois, Urbana-Champaign; Sandy Dall'erba, University of Illinois Urbana-Champaign
- *Productivity Convergence and Spatial Dependence Among the Spanish Regions*, Sandy Dall'erba, University of Illinois, Urbana-Champaign

Discussants:

Stamatis Kalogirou, Newcastle University
Sandy Dall'erba, University, Illinois Urbana-Champaign
Cem Ertur, Université de Bourgogne
Julie Le Gallo, University, Illinois Urbana-Champaign

39. Urban Economics: Urban Productivity (Aria B)

Chair: Richard J. Arnott, Boston College

- *Moving Costs, Security of Tenure and Eviction*, Richard J. Arnott, Boston College; Alex Anas, State University at Buffalo-SUNY
- *Cultural Diversity and Productivity in US Cities*, Gianmarco Ottaviano, Università di Bologna and CEPR; Giovanni Peri, UC Davis and CESifo
- *A Note on the Index of Industrial Localization*, Tomoya Mori, Kyoto University; Koji Nishikimi, Institute of Developing Economies; Tony E. Smith, University of Pennsylvania
- *Agglomeration, Increasing Returns, Externalities and Welfare: Testable Implications and Empiricism*, Marcus Berliant, Washington University in St. Louis; Daniel P. McMillen, University of Illinois at Chicago

Discussants:

Tomoya Mori, Kyoto University
Richard J. Arnott, Boston College
Gianmarco Ottaviano, Università di Bologna and CEPR
David Pines, Tel Aviv University

40. Urban Housing and Neighborhood Dynamics (Sonata 3)

Chair: Edward Coulson, The Pennsylvania State University

- *Impacts of Subsidized Rental Housing on Neighborhoods*, Ingrid Gould Ellen, New York University; Michael Schill, New York University; Amy Ellen Schwartz, New York University; Ioan Voicu, New York University
- *Neighborhood Revitalization in New York City in the 1990s*, James Orr, Federal Reserve Bank of New York; Jason Bram, Federal Reserve Bank of New York; Jesse Edgerton, Federal Reserve Bank of New York; Yigal Gelb, Columbia University
- *The Decline and Rise of the Immigrant Ghetto: Ethnic Segregation in U.S.*, Jacob L Vigdor, Duke University; David Cutler, Harvard University; Edward Glaeser, Harvard University
- *The Impact of Gentrification on Pre-Existing Residents*, Lance Freeman, Columbia University

Discussants:

Edward Coulson, The Pennsylvania State University
Diana K.Y. Mok, McGill University
Mark Stern, University of Pennsylvania

Philip Graves, University of Colorado at Boulder

41. Local Governments (Maestro B)

Chair: Kurt G Paulsen, Temple University

- *Development of Local Finance in Europe*, Peter Friedrich, University of the Federal Armed Forces; Joanna Gwiazda, Agricultural University, Warsaw; Chang Nam
- *Fiscal Federalism and Economic Geography*, Carl Gaigne, CORE, CERAS and CPER; Stéphane Riou, INRA
- *Demand for Public Education: Evidence from a Rural School District*, Anthony Stair, Frostburg State University; Terance J Rephann, Allegany College of Maryland; Matt Heberling, US Environmental Protection Agency
- *How Should Suburbs Help Their Cities?* Andrew F Haughwout, Federal Reserve Bank of New York; Robert P. Inman, University of Pennsylvania

Discussants:

Kurt G Paulsen, Temple University
Paul Rothstein, Washington University in St. Louis
Maria M. Ferreyra, Carnegie Mellon University
Albert Saiz, University of Pennsylvania

10:00 AM--10:10 AM

42. Presentation Ceremony on the Occasion of the Fiftieth Anniversary of the Regional Science Association International (RSAI) (Symphony Ball Room)

Chairs: Raymond J.G.M. Florax, Free University, Amsterdam; David Plane, University of Arizona

- Presentation of the Golden Anniversary Issue of Papers in Regional Science to Walter Isard, David E. Boyce, Antoine Bailly

10:10 AM--10:45 AM

43. Presidential Address (Symphony Ball Room)

- *The Future (Near and Far) of Regional Science*, Walter Isard, Cornell University

10:45 AM--12:30 PM

44. Entrepreneurship, Geography and Economic Growth (Minuet)

Chair: Marie-Francoise Calmette, Toulouse University

- *Knowledge Spillovers, Geography and Macroeconomic Growth*, Attila Varga, University of Pecs; Hans Joachim Schalk, University of Munster

- *The Missing Link: The Knowledge Filter, Entrepreneurship and Endogenous Growth*, Zoltan J. Acs, University of Baltimore; David Audretsch, Indiana University; Pontus Braunerhjelm, Linköping University; Bo Carlsson, Case Western Reserve University
- *Creativity and Entrepreneurship: A Regional Analysis of New Firm Formation*, Sam Youl Lee, Carnegie Mellon University; Richard Florida, Carnegie Mellon University; Gary J. Gates, The Urban Institute; Zoltan J. Acs, University of Baltimore

Discussants:

David Pines, Tel Aviv University
 Borje Johansson, Jönköping International Business School
 Roger R. Stough, George Mason University

45. Geodemographics and Migration: Methods and Models (Sonata 5)

Chair: Brigitte S. Waldorf, University of Arizona

- *Spatial Scale Variations and the Accuracy of the Long-Boertlein Index of Repeat Migration*, K Bruce Newbold, McMaster University
- *Formulating a General Spatial Segregation Measure*, David W. Wong, George Mason University
- *Modeling Spatial-Temporal Structures in Migration Systems*, Stuart H. Sweeney, University of California at Santa Barbara; Kevin J. Konty, University of California at Santa Barbara
- *Reflections on a Further Decade of Developments in Geodemographics: The Continuing Evolution of UK Census-Based Area Classifications*, Peter J B Brown, University of Liverpool

Discussants:

Carl Amrhein, University of Alberta, Canada
 Lawrence A. Brown, Ohio State University
 Edmund J. Zolnik, Binghamton University
 Katherine Hempstead, Rutgers University

46. Input-Output Analysis IV: Impact Analysis (Concerto A)

Chair: Julie Le Gallo, University of Illinois, Urbana-Champaign

- *Strategic Importance of Economic Impacts of the Cokemaking Supply*, Karen Polenske, MIT
- *The Identification of Fundamental Economic Structure in India*, Sudhir Thakur, The Ohio State University; Randall W Jackson, West Virginia University; David S Kraybill, Department of Agricultural Economics, The Ohio State University
- *A Study of Simulation of the Andalusia's Input-Output Coefficients Matrix on the Basis of Spanish Input-Output Table for 1995*, Ruben Á. Herrero, Oviedo University; Ana Salome G. Muni, Oviedo University; Carmen R. Carvajal,

Oviedo University

- *Combining Geographical Information Systems and Input-Output Models: Concept and Initial Ideas*, Joaquim J.M. Guilhoto, University of São Paulo; Geoffrey J.D. Hewings, University of Illinois, Urbana-Champaign; Eliza H. Takashiba, University of São Paulo; Lana M.S. da Silva, University of São Paulo

Discussants:

Euijune Kim, Yonsei University
Marco Percoco, Università Luigi Bocconi
Karen Polenske, MIT
Randall W Jackson, West Virginia University

47. Isard`s Methods of Regional Analysis: A Retrospective (Aria A)

Chair: Kara M Kockelman, University of Texas at Austin

- *Background to Methods of Regional Analysis & Introduction of Panelists*, Kara M Kockelman, University of Texas at Austin
- *An Assessment of the Intersection of Regional Science and Population Analysis Methods*, David Plane, University of Arizona
- *Limits of Social Accounts for Impact Analysis*, Charles L. Leven, Washington University
- *Input-Output Analysis*, Geoffrey John Dennis Hewings, University of Illinois, Urbana-Champaign
- *Interregional Linear Programming - Looking Back from the 21st Century*, Ronald E. Miller, University of Pennsylvania
- *Spatial Interaction Modeling: A 10-Minute Guide*, Stewart Fotheringham, University of Newcastle

RESPONDENT, Walter Isard, Cornell University

48. Location and Land Use (Sonata 4)

Chair: Elena Irwin, The Ohio State University

- *Auction Mechanism for Land Distribution: Experimental Approach*, Tomomi Tanaka, University of Hawaii
- *What if?: A Commercial Off-the-Shelf Urban Model*, Richard E. Klosterman, University of Akron
- *Landscape Externalities and Patterns of Residential Location*, Matthew A. Turner, University of Toronto

Discussants:

Sharon O'Donnell, Baylor College of Medicine
Clifford Allen Lipscomb, Bureau of Economic Analysis, Dept. of Commerce

Elena Irwin, The Ohio State University

49. Location Modeling III (Rhapsody)

Chair: Samuel J Ratick, Clark University

- *Establishment Location in the Context of Urban Input Price Gradients*, Maureen Kilkenny, Iowa State University
- *Planning Models for the Provision of Affordable Housing*, Michael Pennington Johnson, Carnegie Mellon University
- *Effects of Transport Improvements on Commuting and Residential choice*, J Paul Elhorst, University of Groningen, FEW; Jan Oosterhaven, University of Groningen
- *Self-Organizing Role of Space in Economic Activity*, Yuri A. Yegorov, Institute for Advanced Studies

Discussants:

Jan Oosterhaven, University of Groningen (The Netherlands)
Maureen Kilkenny, Iowa State University
Philip Graves, University of Colorado at Boulder
Ronald John McChesney, Ohio State University

50. Human Capital Investment and Rural Economies (Maestro A)

Chair: Eric A Scorsone, University of Kentucky

- *Spread of Knowledge: Effects for Regional Competitiveness and Rural Growth*, Knut Ingar Westeren, North Trondelag College
- *The Returns to Education in Rural Areas*, Stephan J. Goetz, The Pennsylvania State University; Anil Rupasingha, The Pennsylvania State University; Hema Swaminathan, The Pennsylvania State University
- *School Quality Effects on Students' Early Careers*, Robert Morris Gibbs, US Department of Agriculture
- *Does Rural School Quality Contribute to Local Labor Force Quality?*, David L Barkley, Clemson University; Mark S Henry, Clemson University

Discussants:

Victoria Burke, University of Kentucky
Maria M. Ferreyra, Carnegie Mellon University
Mark D. Partridge, St. Cloud State University
David Freshwater, University of Kentucky

51. Spatial Statistics/ Econometrics IV: Spatial Econometric Software Tools (Concerto B)

Chair: Stuart H. Sweeney, University of California at Santa Barbara

- *GeoDa Demonstration*, Luc Anselin, University of Illinois, Urbana-Champaign
- *GEOXP for Spatial Exploratory Data Analysis Using MATLAB Demonstration*, James P LeSage, University of Toledo; Anne Ruiz-Gazen, Université de Toulouse; Julien Moutel, Université de Toulouse; Christine Thomas-Agnan, Université de Toulouse
- *Directions for Spatial Statistics Using R*, Roger Bivand, Norwegian School of Economics and Business Adminis; Nick Nagel, Norwegian School of Economics
- *Exploratory Space-Time Analysis with STARS*, Sergio J Rey, San Diego State University; Mark V. Janikas; Boris Dev; Young-Sik Kim, San Diego State University

52. Transportation and Land Use I (Sonata 3)

Chair: Tschangho John Kim, University of Illinois, Urbana-Champaign

- *Congestion and Safety: A Spatial Analysis of London*, Robert B Noland, Imperial College London; Mohammed A. Quddus, Imperial College London
- *Cross-Sectoral Conceptualization of Job Accessibility Projects: A Spatial Multi-Criteria Decision Support System Application*, Juan F. Ortega, University of Illinois at Chicago; Piyushimita Thakuria, University of Illinois at Chicago
- *Planning and Health Promotion: Quantifying Links Between Land Use, Walking, and Physical Activity*, Marlon G. Boarnet, University of California-Irvine; Michael J. Greenwald, University of Wisconsin, Milwaukee; Tracy McMillan, University of Kansas
- *Measuring the Spatial Efficiency of Non-work Travel: Limitations and Possibilities*, Mark W Horner, Texas State University; Morton E O'Kelly, The Ohio State University

Discussants:

Charles Robin Lindsey, University of Alberta
Mark W Horner, Texas State University
Tschangho John Kim, University of Illinois, Urbana-Champaign
Harvey Miller, University of Utah

53. Urban Economics: Agglomeration (Aria B)

Chair: Edward Glaeser, Harvard University

- *The Demand for Agglomeration*, Edward Glaeser, Harvard University
- *Demonstration Effects*, Gilles Duranton, London School of Economics; Diego Puga, University of Toronto

- *Agglomeration, Labor Supply, and the Urban Rat Race*, Stuart S. Rosenthal, Syracuse University; William Strange, University of Toronto
- *Friendship Networks*, Jan K. Brueckner, University of Illinois

Discussants:

Diego Puga, University of Toronto
 Jan K. Brueckner, University of Illinois
 Edward Glaeser, Harvard University
 William Strange, University of Toronto

54. New Ideas in Regional Analysis (Maestro B)

Chair: Richard Voith, Econsult Corporation

- *Methods of Regional Analyses in the Post-Modern Age: Mindsets, Possibilities and Challenges, 1913-2013*, Andrew Isserman, University of Illinois, Urbana-Champaign
- *Bankruptcy of the Local Railway Company and Financial Support by the Local Governments*, Harunori Shishido, Professor of Kagawa University
- *A Synthetic Methodology for Identifying and Predicting Spatial Patterns of Urban Areas. Application to the Prefecture of Attica, Greece*, Yorgos N Photis, University of Thessaly; Panos Manetos, University of Thessaly
- *A Reference Adaptive Process of Model Reference Adaptive Economics*, Etsuo Yamamura, Hokkaido University

Discussants:

Vassilis Monastiriotis, London School of Economics
 Richard Voith, Econsult Corporation
 Catherine Baumont, Université de Bourgogne
 Franz-Josef Bade, University of Dortmund

12:30 PM--1:45 PM

55. PRSCO Council Working Lunch Meeting (By Invitation Only)

2:00 PM--4:00 PM

56. Meeting of RSAI (by invitation only) (Sonata 1)

2:00 PM--3:45 PM

57. Regional Convergence (Maestro A)

Chair: Andrew Sum, Northeastern University

- *Regional Income Spillovers and Convergence in Thailand*, Suksawat Sajarattanachote, The State University of New York at Buffalo
- *Economic and Social Cohesion versus Regional Convergence in the European Union*, Juan R. Cuadrado-Roura, University of Alcalá - Madrid; Miguel Angel Marcos, University Rey Juan Carlos - Madrid
- *A Meta-Analysis of Beta-Convergence*, Maria Abreu, Vrije Universiteit Amsterdam; Raymond J.G.M. Florax, Free University, Amsterdam; Henri de Groot, Vrije Universiteit Amsterdam
- *Decomposing the Dynamics of Regional Earnings Disparities*, Daniel Felsenstein, Hebrew University of Jerusalem; Michael Beenstock, Hebrew University of Jerusalem

Discussants:

Guang Yang, George Mason University
 Jessie P Poon, University at Buffalo-SUNY
 Andrew Sum, CLMS, Northeastern University
 Yiannis Kamarianakis, Institute of Applied and Computational Mathematics

58. Input-Output Analysis V: Clusters and Circuits (Concerto A)

Chair: Louis de Mesnard, University of Burgundy

- *Building Consensus Clustering: An Evaluation of Industrial Cluster Identification Strategies*, Sergio J Rey, San Diego State University; Daniel J Mattheis, San Diego State University; Young-Sik Kim, San Diego State University
- *Understanding the Shortcomings of Commodity-based Technology in Input-Output Models: An Economic Circuit Approach*, Louis de Mesnard, University of Burgundy
- *The Linkage and the Impact of the Mining Cluster on the Chilean II Region: 1990-2000*, Patricio Aroca, IDEAR

Discussants:

Randall W Jackson, West Virginia University
 Michael Sonis, Bar Ilan University and University of Illinois
 Sudhir Thakur, The Ohio State University

59. Land Use and Housing (Minuet)

Chair: Mark D. Partridge, St. Cloud State University

- *Valuing Quality of Life: Differences Between Renters and Homeowners*, Roxanne Ezzet-Lofstrom, University of Texas, Dallas
- *Interurban Variation in Housing Values and Rents: The Effect of Public Expenditures*, Robyn K. Welch, University of Arizona; Brigitte S. Waldorf,

University of Arizona; John I. Carruthers, Mundy Associates LLC

- *Location-Specific Amenities, Equilibrium, and Constraints on Location Choices*, Brian Cushing, West Virginia University
- *Determinants of New Home Construction in US Counties, 1990-2000*, Stephan J. Goetz, The Pennsylvania State University; Hema Swaminathan, The Pennsylvania State University; Ozgur Tunceli, Penn State University; Anil Rupasingha, The Pennsylvania State University

Discussants:

Edward Glaeser, Harvard University
Roxanne Ezzet-Lofstrom, University of Texas, Dallas
Arthur O'Sullivan, Lewis & Clark College
Mark D. Partridge, St. Cloud State University

60. Location Modeling IV (Rhapsody)

Chair: Richard L. Church, University of California at Santa Barbara

- *Computational Experiments with the Maximal Expected Species Covering Model for Nature Reserve Site Selection*, Kincaid K. Rex, College of William and Mary
- *Locating Air Pollution Monitors for the Assessment of Intra-urban Population Exposure*, Pavlos S. Kanaroglou, McMaster University; Michael Jerrett, McMaster University; Altaf Arain, McMaster University; Morison Jason, Carleton University
- *Restoring Habitat Corridors in Fragmented Landscapes Using Optimization and Percolation Models*, Justin C. Williams, Johns Hopkins University; Stephanie A. Snyder, U.S. Forest Service
- *Species Preservation and Timber Harvesting Using Different Parcel Sizes*, Vladimir Marianov, Pontificia Universidad Catolica de Chile; Charles S ReVelle, Johns Hopkins University; Stephanie A. Snyder, U.S. Forest Service

Discussants:

Bilal Farhan, Ohio State University
Michael J. Kuby, Arizona State University
Lawrence V. Snyder, Lehigh University
Justin C. Williams, Johns Hopkins University

61. Modelling Trade and Freight Flows (Aria A)

Chair: Frank Southworth, Oak Ridge National Laboratory

- *Extending a Random-Utility-Based Multiregional Input-Output Model for Trade: Incorporating Land-Use Constraints, Domestic Demand and Network Congestion*, Kara M Kockelman, University of Texas at Austin; Natalia Ruiz-Juri, Univ. of Texas at Austin

- *Estimating Mexico/United States/Canada Trade Flows Using Border Crossing Constraints*, Ronald John McChesney, Ohio State University; Tim Matisziw, The Ohio State University
- *Impact of Intermodalism on Freight Accessibility in the United States*, Hyunwoo Lim, State University of New York at Buffalo; Jean-Claude Thill, State University of New York at Buffalo
- *Estimating the Impacts of Border Effects on Mexican-Canadian Commodity Flow*, Tim Matisziw, The Ohio State University; Ronald John McChesney, Ohio State University

Discussants:

Frank Southworth, Oak Ridge National Laboratory
 Mark W Horner, Texas State University
 Frank Southworth, Oak Ridge National Laboratory
 Kristian Behrens, University of Burgundy

62. Geographical Patterns of Technology Spillovers (Sonata 3)

Chair: James A. Kurre, The Pennsylvania State University, Erie

- *Spatial Distribution of Innovation Activity. The Case of European Regions*, Raffaele Paci, University of Cagliari/CRENoS; Rosina Moreno-Serrano, University of Barcelona; Stefano Usai, University of Sassari/CRENoS
- *Bayesian Analysis of Knowledge Spillovers*, Olivier Parent, University of Saint-Etienne; Stéphane Riou, INRA
- *Regional Innovation in the US over Space and Time*, Attila Varga, University of Pecs; Luc Anselin, University of Illinois, Urbana-Champaign; Zoltan J. Acs, University of Baltimore; Oleg Smirnov, University of Illinois, Urbana-Champaign
- *The Spatial Dimension of Patenting by Multinationals in Europe*, Bart Verspagen, Eindhoven University of Technology; Wilfred Schoenmakers, Maastricht University/MERIT

Discussants:

James A. Kurre, The Pennsylvania State University, Erie
 Jacob Arie Jordaan, London School of Economics
 Norihiko Yamano, CRIEPI
 José Pedro Pontes, Instituto Superior de Economia e Gestão

63. Public Economics I. Within and Between Government Relations (Maestro B)

Chair: Maureen Kilkenney, Iowa State University

- *Local Fiscal Structures and Land Use Change: Do Taxes Cause Sprawl?*, Kurt G

Paulsen, Temple University

- *Fiscal Cooperation and the Permission to Tax*, Paul Rothstein, Washington University in St. Louis
- *The Median Voter Didn't Show Up: Representative Democracy and Public Employees' Wages*, Albert Saiz, University of Pennsylvania
- *Accountability for Whom? School Segregation and the Impact of No Child Left Behind*, Amy Ellen Schwartz, New York University; Leanna Stiefel, New York University

Discussants:

Tatsuaki Kuroda, Nagoya University
Maureen Kilkenny, Iowa State University
Santiago M Pinto, West Virginia University
Jacob L Vigdor, Duke University

64. Regional Labor Markets (Sonata 5)

Chair: Joseph Persky, University of Illinois at Chicago

- *Is the Division of Labor Limited by the Extent of the Market? Some Evidence from French Cities*, Gilles Duranton, London School of Economics; Hubert Jayet, University of Lille 1 and CNRS GDR ASPE
- *Labor Market Spillover Effects of Welfare Reform*, Timothy J. Bartik, W.E. Upjohn Institute for Employment Research
- *Matches, Vacancies and Job Seekers: Evidence from Regional Data*, Aki Kangasharju, Government Institute for Economic Research; Jaakko Pehkonen, University of Jyväskylä; Sari A Pekkala, Government Institute for Economic Research
- *New Evidence on the Wage Curve: A Spatial Panel Approach*, Uwe Blien, Institut fuer Arbeitsmarkt- und Berufsforschung; J Paul Elhorst, University of Groningen, FEW; Katja Wolf, University of Nuernberg

Discussants:

Suminori Tokunaga, University of Tsukuba
Jos van Ommeren, Free University
Emilio Congregado, University of Huelva
Nada Wasi, University of California, San Diego

65. Transportation and Land Use II (Concerto B)

Chair: Andrew F Haughwout, Federal Reserve Bank of New York

- *A General Equilibrium Model of Regional Economy and Land Use*, Alex Anas, State University at Buffalo-SUNY; Elena Safirova, Resources for the Future
- *Evaluation, Project Prioritization and Policy Implications of Transportation*

Investments Projects in New York, Joseph (Yossi) Berechman, Tel Aviv University & The City College of NY; Robert E. Paaswell, The City College of New York

- *Expectations, Development, and Transportation Investment*, Richard Voith, Econsult Corporation; David L Crawford, Econsult Corporation;

Discussants:

Joseph (Yossi) Berechman, Tel Aviv University & The City College of NY
Alison F. Davis, North Carolina State University
Michael Luger, University of North Carolina

66. Empirical Analyses of Urban Structure (Aria B)

Chair: Paul A Coomes, University of Louisville

- *The Cost Effectiveness of Alternative Instruments to Control Urban Sprawl*, Antonio M Bento, University of California, Santa Barbara; Sofia Franco; Daniel Kaffine
- *Is Tokyo Too Big: An Application of the Henry George Theorem*, Yoshitsugu Kanemoto, University of Tokyo; Etsuro Shioji, Yokohama National University; Reiji Kurima, University of Tokyo; Hiroshi Saito, Toyo University
- *Specialization and Diversification in the Agglomeration of Ile-de-France: An Exploratory Spatial Analysis over 1978-1997*, Rachel Guillain, LATEC - Université de Bourgogne; Julie Le Gallo, University of Illinois
- *Human Capital, Higher Education and Graduate Migration*, Philip McCann, University of Reading; Stephen C Sheppard, Williams College

Discussants:

Marc-Urbain Proulx, University of Quebec at Chicoutimi
Charles L. Leven, Washington University
Mira G. Baron, Technion-Israel Institute of Technology
Paul A Coomes, University of Louisville

4:00 PM--5:45 PM

67. Regional Inequality (Maestro A)

Chair: Edmund M Tavernier, Rutgers University

- *The Tertiary Sector and Regional Inequality in Brazil*, Carlos R. Azzoni, University of Sao Paulo, Brazil; Alexandre S Andrade, University of Sao Paulo, Brazil
- *Does Foreign Direct Investment Reduce Inequality among Countries in Productivity?*, Hiranya K Nath, Sam Houston State University; Gouranga G Das, Hanyang University, Asnan Campus; Halis Murat Yildiz, Ryerson University
- *Structure of Interregional Trade and Migration Flows in Spain: Analogy or Disparity?*, Sandy Dall' erba, University of Illinois, Urbana-Champaign; Dong Guo, REAL
- *Widening Inequality Among Geographic Areas Within the Northeast Region of the U.S.:*

An Economic Paradox, Andrew Sum, Northeastern University; Gustav Schachter, Northeastern University; Ishwar Khatiwada, Northeastern University

Discussants:

Arthur L. Silvers, University of Arizona
Maria Abreu, Vrije Universiteit Amsterdam
Vassilis Monastiriotes, London School of Economics
Edmund M Tavernier, Rutgers University

68. Input-Output Analysis VI: Structural Decomposition and Direct Coefficient Change (Concerto A)

Chair: Adam Rose, The Pennsylvania State University

- *Integration, Economic Structure and Technical Change. Notes on the Interpretation of the Technical Coefficients*, Fidel Aroche, Universidad Nacional Autonoma de Mexico and Pontificia Universidad Catolica del Peru
- *Structural Change in the Chilean Economy*, Patricio Aroca, IDEAR; Geoffrey J.D. Hewings, University of Illinois, Urbana-Champaign
- *Structural Decomposition Analysis in Partially Closed Input-Output Models*, Erik Dietzenbacher, University of Groningen; Gülay Günlük-Senesen, Istanbul University

Discussants:

Patricio Aroca, IDEAR
Louis de Mesnard, University of Burgundy
Adam Rose, The Pennsylvania State University

69. Location Modeling V (Rhapsody)

Chair: Justin C Williams, Johns Hopkins University

- *Addressing Quality and Coverage in Transit System Management*, Changshan Wu, University of Wisconsin, Milwaukee; Alan T Murray, The Ohio State University
- *An Integrated Methodology for the Rapid Transit Network Design Problem*, Juan A Mesa, Universidad de Sevilla; Gilbert Laporte, HEC Montreal; Francisco A. Ortega, Universidad de Sevilla
- *Corridor Location: Generating Alternatives with the Multi-gateway Model*, Richard L. Church, University of California at Santa Barbara; Maria Paola Scaparra, University of California at Santa Barbara
- *The Flow-Refueling Location Problem for Alternative-Fuel Vehicles*, Michael J. Kuby, Arizona State University; Seow Lim, Arizona State University

Discussants:

Yoshiaki Ohsawa, University of Tsukuba
Charles S ReVelle, Johns Hopkins University
Ningchuan Xiao, The University of Iowa
Tim Matisziw, The Ohio State University

70. Migration and Place Characteristics (Sonata 5)

Chair: David Plane, University of Arizona

- *The Impact of Parklands on New Jersey County Growth*, Brigit E Martin, Colorado State University
- *Technology and the Homogenization of US Metropolitan Areas 1970-2000*, Katherine F. Bartley, University of Pennsylvania
- *Is Welfare a Magnet for Migrants? New Evidence from CPS Data*, Philip Graves, University of Colorado at Boulder; Michael J. Greenwood, University of Colorado at Boulder
- *Why Are Some Cities So Crowded?* Jordan Rappaport, Federal Reserve Bank of Kansas City

Discussants:

Mika Haapanen, University of Jyväskylä
Stuart H. Sweeney, University of California at Santa Barbara
Sari A Pekkala, Government Institute for Economic Research
K Bruce Newbold, McMaster University

71. Technology and Growth in Urban Areas (Sonata 3)

Chair: Sergio J Rey, San Diego State University

- *Knowledge and Knowledge Spillovers in Regional Economic Growth*, Yujeung Ho, Univ. of Pittsburgh; Siddharth Chandra, University of Pittsburgh; Jiwoong Yoon, Carnegie Mellon Univ.
- *Urban Wage Inequalities and Electronic Networks*, Elsie L. Echeverri-Carroll, University of Texas at Austin; Mayuresh Kshetramade, CGIAR
- *Spatial Proximity and Complementarities in the Trading of Tacit Knowledge*, Neslihan Aydogan, University Of Maastricht; Thomas Paton Lyon, Kelley School of Business Indiana University
- *Why Does Manufacturing Productivity Vary Across Metro Areas?*, James A. Kurre, The Pennsylvania State University, Erie; Amy L. Hunter, Arbor, Inc.

Discussants:

Peter Kroll, CHI Research, Inc.
Catarina de Sousa Figueira, Cranfield University
Edward Feser, University of North Carolina
Daniel C. Monchuk, Iowa State University

72. Housing Markets: Price Outcomes (Maestro B)

Chair: Joyce Cooper, University of Texas

- *The Spatial Impact of Brownfields on Neighboring Property Values*, Benjamin Widner, Colorado State University

- *The Demand for Environmental Quality: A Spatial Hedonic Analysis*, David M. Brasington, Louisiana State University; Diane Hite, Auburn University
- *Disentangling the Market Price: Seller's Reservation Price, Buyer's Offer Price, and The Listing's Days on Market*, Diana K.Y. Mok, McGill University

Discussants:

Elena Safirova, Resources for the Future
 Elena Safirova, Resources for the Future
 Philip McCann, University of Reading

73. Time Series Modeling of Urban and Regional Fluctuations (Sonata 4)

Chair: Edward Coulson, The Pennsylvania State University

- *Understanding House Price Volatility: Measuring and Explaining the Supply Side of Metropolitan Area Housing Markets*, Bengte Evenson, Illinois State University
- *Permanent and Transitory Shocks in a Regional Economy*, Harvey S Cutler, Colorado State University; Scott England, California State University at Frersno; Martin Schmidt, Portland State University
- *How Strong Is Co-Movement in Employment Over the Business Cycle? Evidence from State/Industry Data*, Gerald Carlino, Federal Reserve Bank of Philadelphia; Robert DeFina, Villanova University
- *The Relationship Between Economic Activity and Tax Bases for New York State and New York City*, Andrew F Haughwout, Federal Reserve Bank of New York; Robert Rich, Federal Reserve Bank of New York; James Orr, Federal Reserve Bank of New York; Jason Bram, Federal Reserve Bank of New York; Rae Rosen, FRBNY

Discussants:

Edward Coulson, The Pennsylvania State University
 Dan S. Rickman, Oklahoma State University
 Mark D. Partridge, St. Cloud State University
 Bengte Evenson, Illinois State University

74. Spatial Statistics/ Econometrics IV: Spatial Econometric Methodology (Concerto B)

Chair: Daniel A. Griffith, University of Miami

- *Solving Stochastic Locational Planning Problems: Definition of a Computational Algorithm in a Spatiotemporal Methodological Framework*, Yorgos N Photis, University of Thessaly; George Grekousis
- *Pattern Detail and the Spatial Weights Matrix*, Arthur Getis, San Diego State University; Jared Aldstadt, San Diego State University
- *So What is the Size of Your Georeferenced Sample?*, Daniel A. Griffith, University of Miami
- *Spatial Econometric Applications in Agricultural and Resource Economics: A*

Survey, Anil Sulgham, Louisiana State University; Hector O Zapata, Louisiana State University

Discussants:

Daniel A. Griffith, University of Miami
Anil Sulgham, Louisiana State University
Arthur Getis, San Diego State University
James P LeSage, University of Toledo

75. Transportation and Land Use III (Aria A)

Chair: Francesca Medda, University of Reading

- *Cities & Satellite Imagery: Models for Regional Change*, Kara M Kockelman, University of Texas at Austin; Chris Frazier, Univ. of Texas at Austin
- *Incorporation of Land-use Changes in a Project Appraisal Method for Transport Infrastructure*, Barry Zondag, Delft University of Technology, RAND; Robert Verhaeghe, Delft University of Technology
- *Modeling the Dynamic Effects of Transport Improvement on Urban Shape*, Francesca Medda, University of Reading; Peter Nijkamp, Free University Amsterdam;
- *Local Scale K-Function Analysis for a Network-Constrained Spatial Phenomenon*, Ikuho Yamada, State University of New York at Buffalo; Jean-Claude Thill, State University of New York at Buffalo

Discussants:

Michael J. Greenwald, University of Wisconsin, Milwaukee
Francesca Medda, University of Reading
Peter Friedrich, University of the Federal Armed Forces
Barry Zondag, Delft University of Technology, RAND

76. Urban and Regional Development (Minuet)

Chair: Marlon G. Boarnet, University of California-Irvine

- *Economic Growth and Land Absorption in United States Metropolitan Areas, 1987 - 1997*, John I. Carruthers, Mundy Associates LLC; Gordon F. Mulligan, University of Arizona
- *Philadelphia City Tax Structure And The Metropolitan Economy*, Richard Voith, Econsult Corporation
- *Cities, Regions and the Decline of Transport Costs*, Edward Glaeser, Harvard University; Janet Kohlhase, University of Houston

Discussants:

Marlon G. Boarnet, University of California-Irvine
David King, University of California, Los Angeles
Charles L. Leven, Washington University

77. Urban Economics: In Memory of Professor N. Sakashita (Aria B)

Chair: John Vernon Henderson, Brown University

- *Interregional and International Trade: Seventy Years after Ohlin*, Jacques-Francois Thisse, CORE, CERAS and CPER; Kristian Behrens, LATEC - University of Burgundy; Carl Gaigne, CORE, CERAS and CPER; Gianmarco Ottaviano, Università di Bologna and CEPR
- *Urbanization and City Growth*, John Vernon Henderson, Brown University; H.G. Wang, Brown University
- *Knowledge Creation as a Square Dance on the Hilbert Cube*, Masahisa Fujita, Kyoto University ; Marcus Berliant, Washington University in St. Louis

Discussants:

John Vernon Henderson, Brown University
 Robert Helsley, University of British Columbia
 Alex Anas, State University at Buffalo-SUNY

6:00 PM--6:45 PM

78. Advisory Board Meeting, Regional Research Institute, West Virginia University. "By invitation only" (Aria B)

6:30 PM--8:30 PM

79. Zell/Lurie Real Estate Center at the Wharton School of the University of Pennsylvania Reception for Conference Participants. (Symphony Ballroom)

All who attended the first regional science meeting in Detroit will be recognized.

RSAI Fellows will be honored.

Saturday, November 22

7:00 AM--8:30 AM

80. Meeting of the Editorial Board of the Annals of Regional Science (Sonata 1)

8:30 AM--3:30 PM

REGISTRATION AND EXHIBITS (Overture)

8:30 AM--10:15 AM

81. Agriculture, Natural Resources and Regional Growth (Minuet)

Chair: John W. Green, U.S. Dept. of Agriculture

- *Global-local Constriction to Land Programs in Guatemalan City-region and Indigenous Highlands*, Miguel Angel Chacon, State University of New York at Buffalo
- *Renewable Resource Management in Developing Countries: How Long Until Crisis?*, Amit Batabyal, Rochester Institute of Technology; Hamid Beladi, North Dakota State University

Discussants:

Eduardo Amaral Haddad, University of São Paulo
Carlos R. Azzoni, University of Sao Paulo, Brazil

82. Fundamental Issues in Transportation Network Modeling Reconsidered (Aria A)

Chair: Anna Nagurney, University of Massachusetts

- *Developing a Link Performance Function for Dallas/Fort Worth Area*, Shahram Bohluli, North Central Texas Council of Governments
- *A Multi-location Study on the Flow-Density Relation in Urban Road Networks*, Yiannis Kamarianakis, IACM FORTH; Poulicos Prastakos, IACM FORTH
- *A GIM Algorithm for Finding the SUE of the Logit-based Stochastic Traffic Assignment Problem*, Shang-Hsing Hsieh; Jan-Mou Li
- *A Model of the Rise and Fall of Roads*, Lei Zhang, University of Minnesota; David M Levinson, University of Minnesota

Discussants:

Hillel Bar-Gera, Ben-Gurion University of the Negev, Israel
Elliot Torres, Borland Software Corporation
Yiannis Kamarianakis, Institute of Applied and Computational Mathematics
Anna Nagurney, University of Massachusetts

83. Labor and Regional Development (Sonata 5)

Chair: Jaakko Pehkonen, University of Jyväskylä

- *An Integrated Analysis of Labor Force Participation Rates at Both the Regional and National Level of the Member States of the European Union*, Annette Sophia Zeilstra, University of Groningen, FEW; J Paul Elhorst, University of Groningen, FEW
- *State Minimum Wages, Employment Growth, and Economic Development*, Joseph Persky, University of Illinois at Chicago; Ron Baiman, University of Illinois at Chicago
- *Sectoral Wage Setting in the United Kingdom*, Catarina de Sousa Figueira, Cranfield University
- *Labor Market Size and Unemployment Duration*, Peter V Schaeffer, West Virginia University; Tesfa G Gebremedhin, West Virginia University

Discussants:

Hubert Jayet, University of Lille 1 and CNRS GDR ASPE
Ann Roell Markusen, University of Minnesota
Simonetta Longhi, Free University Amsterdam
Ron Baiman, University of Illinois at Chicago

84. Labor Migration (Concerto A)

Chair: Brian Cushing, West Virginia University

- *New Evidence of the Effect of Transaction Costs on Residential Mobility*, Jos van Ommeren, Free University; Michiel van Leuvensteijn van Leuvensteijn, CPB Netherlands
- *What Draws People To Urban Growth Centers: Jobs Vs. Pay?* Sari A Pekkala, Government Institute for Economic Research
- *Do Labor Market Conditions Affect Migration Decisions? The Lowry Hypothesis Revisited*, Stewart Fotheringham, University of Newcastle; Stamatis Kalogirou, Newcastle University

Discussants:

Qinghua Zhang, University of Texas at Austin
Jacques Ledent, INRS Urbanisation, Culture et Société
Michael J. Greenwald, University of Wisconsin, Milwaukee

85. Location Modeling VI-Solution Techniques (Rhapsody)

Chair: Michael J. Kuby, Arizona State University

- *BEAMR: Both Exact and Approximate Model Representations of the p-median Problem*, Richard L. Church, University of California at Santa Barbara
- *A Recurrent Neural Network for Location Problems*, Enrique Dominguez Merino, University of Malaga; José Muñoz Pérez, University of Malaga
- *Heuristic Concentration and the Maximal Covering Location Problem*, Charles S ReVelle, Johns Hopkins University; Michelle M Mizumori, Johns Hopkins University; Justin C Williams, Johns Hopkins University
- *Solving Site Search Problems Using Evolutionary Algorithms*, Ningchuan Xiao, The University of Iowa

Discussants:

Rex K. Kincaid, College of William and Mary
Gilbert Laporte, HEC Montreal
John E Bell, Auburn University
Phillip J. Lederer, Simon School

86. Theories and Models of Technology Diffusion and Regional Growth (Sonata 3)

Chair: Bernard Fingleton, Cambridge University

- *Innovation Study: From Coherence to Diversity*, Eunjoo Oh, Georgia Institute of Technology

- *A Model of R&D Policy Imitation and Regional Performance*, Bart Los, University of Groningen/GGDC

Discussants:

Alessandro Nuvolari, Eindhoven University of Technology
 Nilotpal Das, University of Delaware

87. Regional Economic Effects of Disasters II (Sonata 4)

Chair: Yasuhide Okuyama, West Virginia University

- *Direct Estimation of the Event Matrix in the Case of a Major Catastrophe: Flooding in The Netherlands*, Albert E Steenge, Universiteit Twente; Marija Bockarjova, Universiteit Twente
- *Microsimulation for Local Impact Analysis: An Application to Plant Shutdown*, Terance J Rephann, Allegany College of Maryland; Kalle Mäkilä, Spatial Modelling Centre; Einar Holm, Spatial Modelling Centre
- *Simulation of Fire Company Response Time*, Jean-Claude Thill, University at Buffalo; Irene Casas, University at Buffalo-SUNY; Sandeep Kumar Jakkaraju, University at Buffalo-SUNY
- *Retrofit Priority for Bridges under Various Earthquake Scenarios: Model Formulation and Scenario Analysis*, Tschangho John Kim, University of Illinois, Urbana-Champaign; Sam Youl Lee, Carnegie Mellon University; Geoffrey John Dennis Hewings, University of Illinois at Urbana-Champaign

Discussants:

Sam Cole, University at Buffalo
 Yasuhide Okuyama, West Virginia University
 Terance J Rephann, Allegany College of Maryland
 Jean-Claude Thill, State Univeristy of New York at Buffalo

88. Rural Development Sessions: Rural Policy Perspectives (Maestro A)

Chair: Jill Kriesky, West Virginia University

- *Land Use Policy and Water Planning in the American West: A Comparative Analysis*, Ellen Hanak, Public Policy Institute of California; Margaret K Browne, Woodrow Wilson School, Princeton University
- *Rural Policy as if Place Mattered, or Not*, Timothy R. Wojan, US Department of Agriculture
- *Multifunctionality: An Unfortunate Terminology for an Important Rural Development Concept*, David Freshwater, University of Kentucky
- *State Budget Crisis and Local Governments*, Judith I Stallmann, University of Missouri

Discussants:

Andrew Isserman, University of Illinois, Urbana-Champaign
 Jill Kriesky, West Virginia University
 Edmund M Tavernier, Rutgers University

Martin Shields, The Pennsylvania State University

89. Shopping and Shipping Goods Location (Concerto B)

Chair: Maureen Kilkenny, Iowa State University

- *The Pricing of Delivery Services*, Charles A Ingene, University of Mississippi; Amiya Basu, Syracuse University; Tridib Mazumdar, Syracuse University
- *The Organizational Structure and Locational Dynamics of Investment Advisory Services: the Case of Metropolitan Philadelphia, 1983-2003*, John E. Bodenman, Bloomsburg University
- *Spatial Competition around a Major Import/Export Node: Is Globalization Good for Old Inner Cities?*, Didier Baudewyns, Free University of Brussels
- *Agglomeration and the Location of Service Branches*, Mira G. Baron, Technion-Israel Institute of Technology

Discussants:

Francisco Silva, Universitat Pompeu Fabra
Maureen Kilkenny, Iowa State University
Somik V Lall, The World Bank
Wade A Hudson, Colorado State University

90. Urban Economics: Urban System (Aria B)

Chair: Marcus Berliant, Washington University in St. Louis

- *Vanishing Cities: What Does the New Economic Geography Imply about the Efficiency of Urbanization?*, Alex Anas, State University at Buffalo-SUNY
- *Diversity and Optimal City Size: First and Second Best*, Oded Hochman, Ben Gurion University of Negev; David Pines, Tel Aviv University
- *The Effect of Property Tax Rebates to Residential Community Associations on Provision and Welfare*, Jeremy R. Groves, Washington University of Saint Louis

Discussants:

Hesham M. Abdel-Rahman, University of New Orleans
Marcus Berliant, Washington University in St. Louis
Takatoshi Tabuchi, University of Tokyo

91. Urbanization Economies and Amenities (Maestro B)

Chair: Robert M. Hunt, Philadelphia Federal Reserve

- *The Role of Localized Goods in Segregation -- The Case of Schools*, Paul Charles Cheshire, London School of Economics; Stephen C Sheppard, Williams College
- *Regional Growth and Decline: Amenity, Economic, and Political Interactions*, Philip Graves, University of Colorado at Boulder
- *The Determinants of Agglomeration in a Continuous Framework*, Eric Marcon,

ENGREF; Florence Puech, TEAM - Université Paris I

- *A Model of Crime and Gentrification*, Arthur O` Sullivan, Lewis & Clark College

Discussants:

Jessie P Poon, University at Buffalo-SUNY

TBA

Up Lim, The University of Texas at Austin

Robert M. Hunt, Philadelphia Federal Reserve

10:30 AM--12:15 PM

92. Demographic Change and Urban Schools (Sonata 5)

Chair: Lawrence A. Brown, Ohio State University

- *Immigrants and School Change: Evidence from New York City*, Ingrid Gould Ellen, New York University; Katherine M O'Regan, New York University; Leanna Stiefel, New York University; Amy Ellen Schwartz, New York University
- *Why Are Some Schools More Segregated than Others? Understanding Racial and Nativity Segregation Inside New York City Public Schools*, Dylan Conger, New York University
- *Will Changing Demographics Reduce the Support for Local Public Schools?*, Chris Mayer, University of Pennsylvania; Christian Hilber, Fannie Mae Foundation
- *Estimating the Effects of Private School Vouchers in Multi-District Economies*, Maria M. Ferreyra, Carnegie Mellon University

Discussants:

Katherine Hempstead, Rutgers University

Lawrence A. Brown, Ohio State University

Steven Craig, University of Houston

Amy Ellen Schwartz, New York University

93. Input-Output Analysis VII: SAM and CGE issues (Concerto A)

Chair: Maureen Kilkeny, Iowa State University

- *The Importance of Macro-economic Constraints in the Operation of a Two-region Computable General Equilibrium (CGE) Model*, J. Kim Swales, Strathclyde University; Linda Ferguson, Strathclyde University; D. Learmonth; Peter G. McGregor
- *Assessing the Regional Economic Impact of an Airport: A Dynamic Multiregional CGE Study of Melbourne Airport*, John R. Madden, Monash University
- *An Application of Integrated Transport Network--Multiregional CGE Model III: An Impact Analysis of Highway Investment by Financial Procurement Approach*, Euijune Kim, Yonsei University; Geoffrey John Dennis Hewings, University of

Illinois, Urbana-Champaign

- *Interregional Social Accounting Matrices for Denmark*, Bjarne Madsen, AKF; Chris Jensen-Butler, University of St. Andrews

Discussants:

Maureen Kilkenny, Iowa State University
Bart Los, University of Groningen/GGDC
Kara M Kockelman, University of Texas at Austin
Bernadette Andreosso-O'Callaghan, University of Limerick

94. Location Modeling VII (Rhapsody)

Chair: Daniel Serra, Universitat Pompeu Fabra

- *GTMx: An Analytical Tool for Power System Components Acting in Concert*, O. Benjamin Schoepfle, Argonne National Laboratory; Thomas D Veselka, Argonne National Laboratory; Matthew R Mahalik, Argonne National Laboratory; Mary S. Ongena, Argonne National Laboratory
- *A Simulated Annealing Approach for the Composite Facility Location and Resource Allocation Problem*, John E Bell, Auburn University; Patrick R. McMullen, Wake Forest University
- *Employee Positioning and Workload Allocation*, H. A. Eiselt, University of New Brunswick; Vladimir Marianov, Pontificia Universidad Catolica de Chile
- *Comparison of Two GIS-based Algorithms for Generating Potential Path Areas*, Darren M. Scott, McMaster University

Discussants:

Michael Sonis, Bar Ilan University and University of Illinois
Pavlos S. Kanaroglou, McMaster University
Ronald Klimberg, St. Josephs University
Richard E. Klosterman, University of Akron

95. Poverty (Sonata 1)

Chair: Timothy J. Bartik, W.E. Upjohn Institute for Employment Research

- *The Evolution of U.S. County Poverty Rates during the 1990s: Is There a Spatial Dimension?* Mark D. Partridge, St. Cloud State University; Dan S. Rickman, Oklahoma State University
- *Economic Growth, Welfare Reform and Poverty Rates: A Panel Study of States for 1984-2000*, Dan S. Rickman, Oklahoma State University; Mark D. Partridge, St. Cloud State University
- *The Racial and Income Dynamics of Suburbanization within Large U.S. Metropolitan Areas: A Longitudinal Analysis of US Census Minor Civil Divisions and County Divisions*, Janice F Madden, University of Pennsylvania

Discussants:

Lance Freeman, Columbia University
Timothy J. Bartik, W.E. Upjohn Institute for Employment Research
Andrew Sum, Center for Labor Market Studies (CLMS)

96. Regional Innovation Systems (Sonata 3)

Chair: Alessandro Nuvolari, Eindhoven University of Technology

- *The Impact of Spatial Innovative Spillins on Innovative Activity in the US Midwest*, Daniel C. Monchuk, Iowa State University; John A. Miranowski, Iowa State University
- *R&D Accessibility and Knowledge Production in Regional Innovation Networks*, Martin Andersson, Jönköping International Business School; Olof Ejermo, Jönköping International Business School; Börje Johansson, Jönköping Internaitonal Business School; Charlie Karlsson, Jönköping International Business School
- *Identifying Surprisingly Innovative Regions*, Peter Kroll, CHI Research, Inc.
- *Academic Research Spillovers - The Case of Biotechnology Industries*, Daniel Shefer, Technion - Israel Institute of Technology

Discussants:

Siddharth Chandra, University of Pittsburgh
Bernard Fingleton, Cambridge University
Sam Youl Lee, Carnegie Mellon University
Marina van Geenhuizen, Delft University of Technology

97. Public Economics 2. Theory of Between Government Relations (Maestro B)

Chair: Andrew F Haughwout, Federal Reserve Bank of New York

- *A Model of Allocation of Political Risks Between Public and Private in Transport Infrastructure Provision*, Francesca Medda, University of Reading
- *Interjurisdictional Crime and Tax Competition*, Santiago M Pinto, West Virginia University
- *Tax-Price Competition for International Quasi-Public Goods*, Tatsuaki Kuroda, Nagoya University
- *A CGE Exploration of Location Incentives Within a Public Choice Framework*, Katherine C Chalmers, Bowling Green State University; Walter Schwarm, West Virginia University;

Discussants:

Paul Rothstein, Washington University in St. Louis
Arthur O` Sullivan, Lewis & Clark College
Andrew F Haughwout, Federal Reserve Bank of New York
Suksawat Sajarattanachote, The State University of New York at Buffalo

98. Real Estate Markets and Policy Effects (Minuet)

Chair: Joe Gyourko, University of Pennsylvania

- *The Knowledge Impacts of Inward Investment Policies*, Philip McCann, University of Reading; Ram Mudambi, Temple University

- *Urban Decline and Housing Reinvestment: The Role of Construction Costs and the Supply Side*, Joe Gyourko, University of Pennsylvania; Albert Saiz, University of Pennsylvania
- *Small Developers and Sub-Optimal Choices*, Rayman Mohamed, Cornell University
- *A Market for Institutions: A Hedonic Price and GIS Application*, William H Rogers, Colorado State University

Discussants:

Todd Sinai, University of Pennsylvania
 Richard Voith, Econsult Corporation
 Stephen C Sheppard, Williams College
 Janet Kohlhase, University of Houston

99. Regional Economic Effects of Disasters III (Sonata 4)

Chair: Yasuhide Okuyama, West Virginia University

- *A Typology of Economic Disruptions*, Adam Rose, The Pennsylvania State University
- *Unprotected Transactions in Disrupted Economic Networks*, Sam Cole, University at Buffalo
- *Economic Hotspots: Visualizing Vulnerability to Flooding*, Anne van der Veen , Universiteit Twente; Christiaan Logtmeijer, Universiteit Twente
- *New York City's Economy in the Aftermath of September 11*, Jason Bram, Federal Reserve Bank of New York; James Orr, Federal Reserve Bank of New York

Discussants:

Jason Bram, Federal Reserve Bank of New York
 Albert E Steenge, Universiteit Twente
 William B. Beyers, University of Washington
 Anne van der Veen , Universiteit Twente

100. Studies in the Economics of Transportation: A Retrospective (Concerto B)

Chair: Suzanne Evans, Birkbeck College, London

- *Background, Context and Reaction to "Studies in the Economics of Transportation"*, David Boyce, University of Pennsylvania
- *Influence of Beckmann, McGuire, and Winsten on Innovations in Modeling, Methodological Developments, and Applications*, Anna Nagurney, University of Massachusetts
- *Beyond Beckmann, McGuire and Winsten's "Studies in the Economics of Transportation"*, Hani Mahmassani, University of Maryland

RESPONSES FROM THE AUTHORS, Suzanne Evans, Birkbeck College, London

101. Trade and Transportation Impacts (Aria A)

Chair: Tim Matisziw, The Ohio State University

- *Do Transport Costs and Tariffs Shape the Space-economy in the Same Way?* Kristian Behrens, LATEC - University of Burgundy
- *Estimation of Regional Economic Benefits from Waterway Improvements Using the Maritime Input-Output Model*, Frank Southworth, Oak Ridge National Laboratory; David P. Vogt, ORNL
- *Transport-Related Fringe Benefits: Implications for Commuting and Relocation*, Jos van Ommeren, Free University; Arno van der Vlist, Free University; Peter Nijkamp, Free University Amsterdam
- *Trade, Technology, and Environment: Theory and Application in U.S. Agriculture*, Shunsuke Managi, South Carolina State University; David Karemera, South Carolina State University

Discussants:

Natalia Ruiz-Juri, Univ. of Texas at Austin
Robert J. Stimson, University of Queensland/ George Mason University
Roger Stough, George Mason University
Colin Gannon, Melbourne, Australia

102. Theoretical Issues about Growth and Agglomeration (Aria B)

Chair: Dean M Hanink, University of Connecticut

- *Dynamic Urban Models: Agglomeration and Growth*, Marcus Berliant, Washington University in St. Louis; Ping Wang, Vanderbilt University
- *Agglomeration, Scope and Location of the Firm*, John Brian Parr, University of Glasgow
- *The New Economic Geography and City Growth [chapter in Elsevier volume edited by Roberta Capello and Peter Nijkamp]*, Kieran P. Donaghy, University of Illinois, Urbana-Champaign; Nazmiye Balta, University of Illinois, at Urbana-Champaign

Discussants:

Yoshitsugu Kanemoto, University of Tokyo
José Pedro Pontes, Instituto Superior de Economia e Gestão
Theodore M Crone, Federal Reserve Bank of Philadelphia

103. Regional Competitiveness (Maestro A)

Chair: Gerald Carlino, Federal Reserve Bank of Philadelphia

- *Effect of a Restriction in the CO2 emission in the Brazilian Economy*, Ricardo Luis Lopes, Maringa State University; Joaquim J.M. Guilhoto, University of São

Paulo

- *Industrial Clusters in Indian Metropolises: Patterns, Processes, Explanations*, Sanjoy Chakravorty, Temple University; Somik V Lall, The World Bank
- *Stochastic Collateral and Strategic Debt Service: Applications to Local Mortgage Markets and Credit Access*, David B Nickerson, Colorado State University and Freddie Mac; Robert A Jones, Simon Fraser University
- *US Federal State Commission: Impact on Rural Economic Development*, Kelly Sue Novak, NADO Research Foundation

Discussants:

Paul Charles Cheshire, London School of Economics
Joseph (Yossi) Berechman, Tel Aviv University & The City College of NY
Timothy R. Wojan, US Department of Agriculture
Becky Zerlentes, Front Range Community College

12:15 PM--1:45 PM

104. NARSC Luncheon and Awards Presentations (Ormandy Ball Room)

1:45 PM--3:30 PM

105. Input-Output Analysis VIII: Extended Analysis (Concerto A)

Chair: Bjarne Madsen, AKF

- *Extended Input-Output Modelling of Regional Impacts: Does Detail Make a Difference?*, Peter Batey, University of Liverpool
- *Energy Input-Output Analysis: A Retrospective*, Peter D. Blair, National Academies of Science and Engineering
- *What is the Best Method of Matrix Adjustment? A Return to the World of Vectors*, Louis de Mesnard, University of Burgundy

Discussants:

Peter D. Blair, National Academies of Science and Engineering
Albert E Steenge, Universiteit Twente
J. Kim Swales, Strathclyde University

106. Location Modeling VIII (Rhapsody)

Chair: Morton E O` Kelly, The Ohio State University

- *Flow-based Discounted Point-to-Point Network Design*, Changjoo Kim, The Ohio State University

- *A Hierarchical Location-Allocation Model with Travel Based on Expected Referral Distances*, M John Hodgson, The University of Alberta
- *Visualization of Bifurcations of Probabilistic Chains*, Michael Sonis, Bar Ilan University and University of Illinois
- *Uniform Spatial Pricing*, Phillip J. Lederer, Simon School

Discussants:

Guido Schwarz, Clark University
 Richard L. Church, University of California at Santa Barbara
 Manfred M Fischer, Vienna University of Economics and Business Administration
 O. Benjamin Schoepfle, Argonne National Laboratory

107. New Approaches to Charting the Contributions of the Arts to Regional Development (Minuet)

Chair: Ann Roell Markusen, University of Minnesota

- *The Music Industrial Complex in Seattle*, William B. Beyers, University of Washington
- *The Artistic Dividend: the Hidden Contribution of the Arts to the Regional Economy*, Ann Roell Markusen, University of Minnesota; David King, University of California, Los Angeles
- *Contingent Valuation and Economic Impact: Substitutes or Complements?*, Bruce Seaman, Georgia State University
- *Cultural Presence and Neighborhood Change in Philadelphia, 1995-2003*, Mark Stern, University of Pennsylvania

Discussants:

Ann Roell Markusen, University of Minnesota
 Brian Knudsen, Carnegie Mellon University
 Brigit E Martin, Colorado State University
 Katherine Hempstead, Rutgers University

108. Pervasive Problems in Dynamic Transportation Network Modeling (Aria A)

Chair: Terry L. Friesz, The Pennsylvania State University

- *Function Transformational Algorithms for the Dynamic Loading Problem*, Robert B Dial, R.B. Dial, Consultants
- *Infinite Dimensional Variational Inequalities and Dynamic Network Equilibrium*, Terry L. Friesz, The Pennsylvania State University; David H. Bernstein, James Madison University
- *An Efficient Simulation Based Approximation Algorithm for the Time Varying*

User Equilibrium Problem, Thanasis K Ziliaskopoulos, Northwestern University

Discussants:

Huey-Kuo Chen, National Central University, Taiwan
Thanasis K Ziliaskopoulos, Northwestern University
Terry L. Friesz, The Pennsylvania State University

109. Public, Private, or Foreign Investment and Productivity (Sonata 3)

Chair: Raffaele Paci

- *Foreign Direct Investment and Technological Spillovers: An Empirical Analysis of the Effects of Competition and Geographical Concentration of Manufacturing Activities*, Jacob Arie Jordaan, London School of Economics
- *Panel Analysis of Regional Public Capital (Estimation of Flexible Production Functional Form by Box-Cox Transformation)*, Norihiko Yamano, Central Research Inst of Elec Power Industry; Toru Ohkawara, CRIEPI

Discussants:

Daniel Shefer, Technion - Israel Institute of Technology
Shunsuke Managi, South Carolina State University

110. Public Economics 3. Empirical Studies of Government Behavior (Maestro B)

Chair: Paul Rothstein, Washington U.

- *Are Suburbs Measuring Sticks for Cities? An Analysis of City Budgets and Suburban Competition*, Steven Craig, University of Houston; Stephanie Botello, University of Houston
- *Tax Structure and Institutions*, Andrew F Haughwout, Federal Reserve Bank of New York
- *Estimation of the Fiscal Impacts of a Product Specific Tax Credit*, Peggy Dalton, Frostburg State University; Dan Mizaak, Frostburg State University

Discussants:

Albert Saiz, University of Pennsylvania
Kurt G Paulsen, Temple University
Luz A Saavedra, University of St. Thomas

111. Regional Employment and Unemployment (Sonata 5)

Chair: Peter V Schaeffer, West Virginia University

- *Does Regional Unemployment Affect Differently on Self-Employment Depending on the Family Background? A Comparison between Individuals from*

Self-employed and Other Families in Finland., Hannu Tervo, University of Jyväskylä

- *The Thick Market Effect on Local Unemployment Rate Fluctuations*, Qinghua Zhang, University of Texas at Austin; Li Gan, University of Texas at Austin
- *Transition to Self-employment with Two Complementary Data Sets*, Emilio Congregado, University of Huelva; Antonio Anibal Golpe, University of Huelva; José María Millán, University of Alicante

Discussants:

J Paul Elhorst, University of Groningen, FEW
Jacques Poot, Victoria University of Wellington
Antonio Paez, McMaster University

112. Rural Development Sessions: Rural Growth and Decline: Sources and Implications (Maestro A)

Chair: Stephan Weiler, Colorado State University

- *Effects of Specialization on Wages and Unemployment under Collective Bargaining Constraints. Evidence from EU Regions*, Simonetta Longhi, Free University Amsterdam; Peter Nijkamp, Free University Amsterdam; Iulia Traistaru, University of Bonn
- *The Economics of Ghost Towns*, Stephan Weiler, Colorado State University; Philip Graves, University of Colorado at Boulder; Emily Bonner, Colorado State University
- *Human Capital and Rural Growth in the Southern United States: 1970-2000*, Mark S Henry, Clemson University; David L Barkley, Clemson University; Haizhen Li, Clemson U
- *Measuring Economic Impact of Endogenous Change in Rural Areas*, Wilbur R Maki, University of Minnesota Emeritus; Knut Ingar Westeren, North Trondelag College

Discussants:

David L Barkley, Clemson University
Eric Thompson, University of Kentucky
J. Matthew Fannin, University of Missouri
Stephan Weiler, Colorado State University

113. Spatial Statistics/ Econometrics VI: Spatial Econometric Methodology (Concerto B)

Chair: Cem Ertur, Université de Bourgogne

- *Spatial ARCH Models: Tests, Models and Applications*, Raymond Florax, Free University; Thomas de Graaff, Free University

- *A Scale-Sensitive Test of Attraction or Repulsion Between Spatial Point Populations*, Tony E Smith, University of Pennsylvania
- *Exploration and Visualization of Space-time Patterns in the Association between Health Effects and Air Quality*, Luc Anselin, University of Illinois, Urbana-Champaign; Julie Le Gallo, University of Illinois Urbana-Champaign; Yougihn Kho, University of Illinois, Urbana-Champaign
- *Nonparametric Spatial Covariance Estimation*, Theophile Azomahou, Universite Louis Pasteur; Dong Li, Kansas State University

Discussants:

Theophile Azomahou, Universite Louis Pasteur
 Sergio J Rey, San Diego State University
 Luc Anselin, University of Illinois, Urbana-Champaign
 Tony E Smith, University of Pennsylvania

114. Transportation Policy Analysis (Sonata 1)

Chair: Jos van Ommeren, Free University

- *Agglomeration Economies and Optimal Transport Policy*, Jan Rouwendal, Free University; Daniel van Vuuren, Free University
- *Investments in Rail Infrastructure: Public-Private Partnership Approach*, Eric Pels, Free University Amsterdam; Francesca Medda, University of Reading; Piet Rietveld, Free University Amsterdam
- *A Spatial Applied General Equilibrium Model for the Planning and the Analysis of Transportation Policies*, Eduardo Simões de Almeida, University of São Paulo; Eduardo Amaral Haddad, University of São Paulo; Geoffrey John Dennis Hewings, University of Illinois, Urbana-Champaign
- *Highway Expenditures and Economic Performance: Exploratory Analysis in a Multi-Year Cross-Country Setting*, Sanya Niumpradit, University of Illinois at Chicago; Piyushimita Thakuria, University of Illinois at Chicago

Discussants:

Mark D. Partridge, St. Cloud State University
 Michael L Lahr, Rutgers University
 Linda Ferguson, Strathclyde University
 Jos van Ommeren, Free University

115. Regions, Cities, and Neighborhoods (Aria B)

Chair: Janet Kohlhase, University of Houston

- *An Alternative Definition of Economic Regions in the U.S.*, Theodore M Crone, Federal Reserve Bank of Philadelphia
- *Metropolitan Growth Patterns: How Many Market Types Are There?* Paul A

Coomes, University of Louisville; Barry J Kornstein, U of Louisville

- *Urban Neighborhood as a Unit for Regional Science Analysis*, Charles L. Leven, Washington University
- *Spatial Segregation, Segregation Indices, and the Geographic Perspective*, Lawrence A. Brown, Ohio State University; Su-Yeul Chung, Ohio State University

Discussants:

Janet Kohlhase, University of Houston
Toshiaki Takita, Yamagata University
Kieran P. Donaghy, University of Illinois, Urbana-Champaign
David W. Wong, George Mason University

116. Issues in Regional Growth (Sonata 4)

Chair: Alexander C Vias, University of Connecticut

- *Environmental Issues of Economic Growth*, Pawel Andrzej Bartoszczuk, System Research Institute
- *Fostering Academic Entrepreneurship: Insights from an Evolutionary Perspective*, Marina van Geenhuizen, Delft University of Technology
- *Leadership and Institutional Factors in Endogenous Regional Economic Development*, Roger R. Stough, George Mason University; Robert J. Stimson, University of Queensland/ George Mason University; Maria E. Salazar, George Mason University

Discussants:

Bin Li, University of Tsukuba
Roger Stough, George Mason University
Eunjoo Oh, Georgia Institute of Technology

3:45 PM--5:30 PM

117. Firms in Regions (Minuet)

Chair: Young-Sik Kim, San Diego State University

- *Production Subcontracting and Location: Panel Data Evidence from Spanish Manufacturing Firms*, Adelheid Holl, University of Sheffield
- *ICT Development and Functional Urban Specialization - Empirical Finding for Germany*, Franz-Josef Bade, University of Dortmund; Claus-Friedrich Laaser, The Kiel Institute for World Economics; Ruediger Soltwedel, The Kiel Institute for World Economics

- *A Comparison of Industrial Location Behavior within the US and European Semiconductor Industries*, Philip McCann, University of Reading; Tomokazu Arita, University of Tsukuba

Discussants:

Neslihan Aydogan, University Of Maastricht
 Young-Sik Kim, San Diego State University
 Emin Dinlersoz, University of Houston

118. Location Modeling IX (Rhapsody)

Chair: Charles S ReVelle, Johns Hopkins University

- *A Dynamic Multi-Objective Location/Allocation Model for E-commerce and the Logistics Industry*, Guido Schwarz, Clark University; Samuel J Ratick, Clark University; Yuko Aoyama, Clark University
- *Competitive Locations When Consumers Minimize Travel Time Plus Waiting Time*, Francisco Silva, Universitat Pompeu Fabra; Daniel Serra, Universitat Pompeu Fabra
- *p-Robust Facility Location Problems*, Lawrence V. Snyder, Lehigh University; Mark S Daskin, Northwestern University
- *A Dynamic Two-Echelon Capacitated Location Problem with Inventory*, Justo Puerto, University of Seville (Spain); Hinojosa Yolanda, University of Seville; Kalcsics Joerg, University of Saarbrücken; Nickel Stefan, University of Saarbrücken; Sebastian Velten, University of Saarbrücken

Discussants:

J Paul Elhorst, University of Groningen, FEW
 Oded Berman, University of Toronto
 Yorgos N Photis, University of Thessaly
 Samuel J Ratick, Clark University

119. Occupational Approaches to Regional Analysis and Development (Sonata 5)

Chair: Pierre Vilain, The Louis Berger Group

- *A Comparison of Labor vs. Value Chain Industrial Linkages with Implications for Industry Cluster Analysis*, Edward Feser, University of North Carolina
- *Regional Occupational and Industrial Structure: Does the One Imply the Other?*, Elisa Barbour, Public Policy Institute of California; Ann Roell Markusen, University of Minnesota
- *Cities as Hierarchists or Specialists? Evidence from Occupational Profiles*, Gregory Schrock, University of Minnesota; Ann Roell Markusen, University of Minnesota

- *Occupational Change in U. S. Intermediate Services: Ethnic, Gender and Local Variations*, J. W. Harrington, Jr., University of Washington

Discussants:

James A. Kurre, The Pennsylvania State University, Erie
 Richard G. Funderburg, II, University of California-Irvine
 Pierre Vilain, The Louis Berger Group
 Katherine F. Bartley, University of Pennsylvania

120. Regional Productivity: Empirical Studies (Sonata 3)

Chair: Daniel Shefer, Technion - Israel Institute of Technology

- *Shift-Share Techniques and Measurement of Labor Productivity Changes: A Sensitivity Analysis*, Esteban Fernandez-Vazquez, University of Oviedo; Carmen R. Carvajal, Oviedo University; Manuel Hernandez-Muniz, University of Oviedo
- *Regional Productivity Convergence Across Sectors in Poland, Hungary and the Czech Republic*, Sandy Dall`erba, University of Illinois, Urbana-Champaign; Yiannis Kamarianakis, Institute of Applied and Computational Mathematics; Julie Le Gallo, University of Illinois, Urbana-Champaign; Maria Plotnikova, University of Illinois, Urbana-Champaign
- *Convergence and Space*, Sergio J Rey, San Diego State University; Mark V. Janikas, San Diego State University
- *Competitiveness and Environmental Regulations: Recasting the Porter Hypothesis*, Shunsuke Managi, South Carolina State University; James Opaluch, University of Rhode Island; Di Jin , Woods Hole Oceanographic Institution; Thomas Grigalunas, University of Rhode Island

Discussants:

Shunsuke Managi, South Carolina State University
 Bart Los, University of Groningen/GGDC
 Raffaele Paci, University of Cagliari/CRENoS
 Paul Charles Cheshire, London School of Economics

121. Rural Development: Retail/Service Sector Development in Rural Areas (Maestro A)

Chair: Wade Hudson, Colorado State University

- *The Economic Impact of Telemedicine: The case of Kentucky*, Eric A Scorsone, University of Kentucky; Victoria Burke, University of Kentucky
- *The Wal-Mart Effect -- A Colorado Retail Case Study*, Wade A Hudson, Colorado State University
- *Population Change, Economic Restructuring, and the Evolving Landscape of*

Retail Activities in the Great Plains, Alexander C Vias, University of Connecticut

- *Using Geographic Interdependencies to Assess Retail Base Spectra*, David William Mushinski, Colorado State University; Stephan Weiler, Colorado State University; Wade Hudson, Colorado State University

Discussants:

David W. Hughes, West Virginia University
Victoria Burke, University of Kentucky
Wade Hudson, Colorado State University
Mark S Henry, Clemson University

122. Spatial Statistics/ Econometrics VII: Applied Spatial Modeling and Methodology (Concerto B)

Chair: James P LeSage, University of Toledo

- *Parallel Method for Maximum Likelihood Estimation of Models with Spatial Dependence*, Oleg Smirnov, University of Illinois, Urbana-Champaign
- *Human Development and Regional Inequalities: A Spatial Econometrics Analysis Across Brazilian Municipalities*, Monica A Haddad, Iowa State University
- *Principles of Neural Spatial Interaction Modeling*, Manfred M Fischer, Vienna University of Economics and Business Administration

Discussants:

Manfred M Fischer, Vienna University of Economics and Business Administration
James P LeSage, University of Toledo Administration
Oleg Smirnov, University of Illinois, Urbana-Champaign

123. Statistical Issues Prevalent in Travel Demand Modeling (Sonata 1)

Chair: Sven Erlander, Linköping University

- *A GIS-Based Travel Simulator under ITS: Activity Scheduling in the Presence of Real-Time Information*, Irene Casas, University at Buffalo-SUNY; Mei-po Kwan, The Ohio State University
- *Mode Choice and Networks: The Economics of Walking, Bicycling and Public Transit Service*, Frank Goetzke, West Virginia University
- *Accessibility, Congestion and Choice: Non-market Consequences of the Urban/suburban Infrastructure.*, Alison F. Davis, North Carolina State University

Discussants:

Michael Wegener, Spiekermann & Wegener (S&W)
Hong K. Lo, Hong Kong University of Science and Technology
June Dong, State University of New York at Oswego

124. Transportation and Public Policy (Aria A)

Chair: Marlon G. Boarnet, University of California-Irvine

- *Mobility Trends of Elderly Canadians, 1986 - 1998*, Darren M. Scott, McMaster University; K Bruce Newbold, McMaster University; Jamie E.L. Spinney, McMaster University
- *Spatial Spillovers of the Appalachia Development Highway System*, Samia Islam, West Virginia University
- *Relationship of Public Assistance and Housing Subsidies to Transportation Expenditures of Low-Income Households*, Yihua Liao, University of Illinois at Chicago; Piyushimita Thakuria, University of Illinois at Chicago
- *Social Science and Policy in Urban Space*, Britton Harris, University of Pennsylvania

Discussants:

Robert B Noland, Imperial College London
Marlon G. Boarnet, University of California-Irvine
Arthur L. Silvers, University of Arizona
Francesca Medda, University of Reading

125. Urban Economics: Urban Growth (Aria B)

Chair: Hesham M. Abdel-Rahman, University of New Orleans

- *Economic Integration and Agglomeration with Endogenous Technological Change*, Ping Wang, Vanderbilt University; Shin-Kun Peng, Academia Sinica and National Taiwan University; Jacques-Francois Thisse, CORE, CERAS and CPER
- *Urban Structure and Growth*, Esteban Rossi-Hansberg, Stanford University; Mark Wright, Stanford University
- *Skill Distribution in a system of Cities in a North-South Trade Model*, Hesham M. Abdel-Rahman, University of New Orleans
- *Locational Disadvantage and Losses from Trade: Three Regions in Economic Geography*, Takatoshi Tabuchi, University of Tokyo

Discussants:

Masahisa Fujita, Kyoto University
Ping Wang, Vanderbilt University
Takatoshi Tabuchi, University of Tokyo
William Strange, University of Toronto

126. Topics in Urban and Spatial Economies (Maestro B)

Chair: John Brian Parr, University of Glasgow

- *Efficient Location Around Central Markets Under Baumol Monetary Rule*, Fernando A Barreiro-Pereira, UNED UNIVERSITY, MADRID
- *A Relation Between Compensation Test and Cost Benefit Analysis Under Spatial Economy RELA*, Tatsuhito Kono, Tohoku University; Akio Kishi, Tohoku University; Rie Kawagishi, Gunma Prefecture; Hisa Morisugi, Tohoku University
- *Indivisibility and Divisibility in Land Development Decisions Over Time and Under Uncertainty*, Amit Batabyal, Rochester Institute of Technology; Seung Jick Yoo, Korea Energy Economics Institute
- *The Optimal Dynamic Urban Economic Model - A Simulation of the Compact City*, Hiroyuki Shibusawa, Toyohashi University of Technology; Yuzuru Miyata, Toyohashi University of Technology

Discussants:

Eric Marcon, ENGREF
Fernando A Barreiro-Pereira, UNED UNIVERSITY, MADRID
John Brian Parr, University of Glasgow
Jan Rouwendal, Free University

127. Regional Development and Transportation Costs (Sonata 4)

Chair: Oded Hochman, Ben Gurion University of Negev

- *Location of Multinational Firms in Asymmetric Countries*, José Pedro Pontes, Instituto Superior de Economia e Gestão
- *Spatial Economic Theory of Central and Local Governments*, Toshiaki Takita, Yamagata University
- *Geographic Change with Trade Based on Comparative Advantage*, Dean M Hanink, University of Connecticut; Robert G Cromley, University of Connecticut
- *The Balanced Regional Development Could Lead to Local Imbalance*, Asao Ando, GSIS, Tohoku University

Discussants:

Scott England, California State University at Frersno
Oded Hochman, Ben Gurion University of Negev
Carl Gaigne, CORE, CERAS and CPER
Yong Li, Hong Kong Polytechnic University

128. Topics in Spatial Methods (Concerto A)

Chair: Charles A Ingene, University of Mississippi

- *A Shopping Choice Model and An Application for Cyber Spaces*, Kabsung Kim, Yonsei University; Seo Yeon Sohn, Yonsei University
- *Planning Data Models*, Lewis D Hopkins, University of Illinois, Urbana-Champaign; Nikhil Kaza, University of Illinois, Urbana-Champaign; Varkki George Pallathucheril, University of Illinois, Urbana-Champaign
- *Theoretical and Operational Issues in Sub-regional Economic Modelling, Illustrated through the Development and Application of the LINE Model*, Chris Jensen-Butler, University of St. Andrews; Bjarne Madsen, AKF
- *Microsimulation and Regional Science: 30 years of Spatial Microsimulation of Populations*, Dimitris Ballas, University of Leeds; Graham Philip Clarke, University of Leeds

Discussants:

Charles A Ingene, University of Mississippi
Naoru Koizumi, University of Pennsylvania
Eduardo Simões de Almeida, University of São Paulo
Lewis D Hopkins, University of Illinois, Urbana-Champaign