

The 69th North American Meetings of the Regional Science Association International

Co-hosted by the North American Regional Science Council
and the Canadian Regional Science Association

November 9 – 12, 2022 Montreal, Quebec

Words of Welcome

Bonjour and welcome you to Montréal! On behalf of the North American Regional Science Council and the Canadian Regional Science Association, we welcome you to the 69th Annual North American Meetings of the Regional Science Association International.

Founded in 1642 by the French, Montréal is Canada's second largest city and one of North America's oldest cities. Before French colonization, Indigenous groups had lived on the island for centuries. Today Montréal is known for its expertise and leadership in the aerospace, transport, finance, pharmaceuticals, education, and technology sectors. Although French is the city's (and province's) official language, English is widely and commonly used throughout the city. If you have some extra time, don't miss the cobblestone streets and European feel of Old Montréal, the views from Mont Royal, or a fresh Montréal bagel (it's worth the trip to the Mile End neighborhood!).

We look forward to some exciting events this year including the Isserman Lecture delivered by Sara Low, the NARSC Presidential Address delivered by Bruce Newbold, and the William Alonso Memorial Prize Lecture delivered by Silvia Cerisola. In addition, we are delighted that this conference will feature the first NARSC Diversity and Inclusion Committee Lecture, to be delivered by Daoqin Tong of Arizona State University. We hope that this will become an annual event at NARSC Conferences. We are also delighted to include two special sessions honoring the life and work of Professor Art Getis, who sadly passed away earlier this year. More information about all of these lectures can be found in the program.

In addition to the line-up of exciting papers over the next three days, the conference offers a great chance to re-connect with colleagues as well as the opportunity to make new connections and collaborations.

We remain vigilant against COVID even as we continue to emerge from the pandemic. While masking is not required at this time, please respect those that do choose to wear a mask during the conference. Should a change in provincial policy around masking occur, we will communicate this to all attendees. If you start to feel unwell, please follow Public Health guidelines around isolation.

Special thanks to John Sporing, the NARSC Executive Director for his guidance and support during the planning of this conference.

Enjoy the 69th NARSC Conference and Montréal!

Bruce Newbold, Local Organizer

Neil Reid, Program Chair

Table of Contents

A Safe and Healthy Conference -----	4
2022 Organizing and Program Committee -----	5
NARSC Graduate Student Paper Competitions -----	7
NARSC Directory -----	8
Past and Future Conferences -----	10
Conference Sponsors -----	13
Instructions to Session Chairs, Presenters, and Discussants -----	17
Conference Highlights and Business Meetings -----	19
Isserman Lecture -----	21
NARSC Presidential Address -----	22
Alonso Prize Lecture -----	23
NARSC Diversity & Inclusion Committee Annual Lecture -----	24
Papers in Regional Science Annual Lecture -----	25
Detailed Program -----	26
Wednesday -----	26
Thursday -----	28
Friday -----	39
Saturday -----	59
Participant Index -----	67
Hotel Floor Plan -----	78
San Diego 2023 -----	79

A Safe and Healthy Conference

NARSC is committed to making the 69th Annual Meetings of the Regional Science Association International a safe and healthy event for our attendees, industry partners, exhibitors, volunteers, and team members. It is important to note that large, in-person meetings are happening throughout the country, and they are happening safely. All conference attendees must agree to the Duty to Self-Monitor during the conference.

IMPORTANT INFORMATION:

Considering the ongoing issue of COVID-19, individuals who fall within any of the categories below should not engage in any NARSC events, or, if registered and fall into one of those categories prior the conference, should request a refund. By attending the 69th Annual Meetings of the Regional Science Association International, you certify that you do not fall into any of the following categories and have complied with the following:

- Individuals who have tested positive for COVID-19 within the prior 10 days of the event or are currently showing COVID-19 symptoms.
- Individuals who within the prior fourteen (14) days of the event have experienced any symptoms associated with COVID-19, which include fever, cough, and shortness of breath among others.
- Individuals who believe that they may have been exposed to a confirmed or suspected case of COVID-19 or have been diagnosed with COVID-19 and are not yet cleared as non-contagious by state or local public health authorities or the health care team responsible for their treatment.

DUTY TO SELF-MONITOR:

Attendees to any activity connected with the 69th Annual Meetings of the Regional Science Association International agree to self-monitor during the event for signs and symptoms of COVID-19 (symptoms typically include fever, cough, and shortness of breath) and immediately contact the AWS staff on-site should they test positive for COVID-19 or experiences symptoms of COVID-19.

LIABILITY WAIVER AND RELEASE OF CLAIMS:

By attending the 69th Annual Meetings of the Regional Science Association International, you acknowledge that your decision to attend is personal and voluntary in nature, and in choosing to do so, recognize, assume all risks associated with attendance, including exposure to COVID-19.

2022 Organizing and Program Committee

Local Arrangements

Bruce Newbold, McMaster University

Program Chair

Neil Reid, University of Toledo

Session and Workshop Organizers

Luc Anselin, University of Chicago

Eleni Bardaka, North Carolina State University

Louafi Bouzouina, Transport Economy Planning Laboratory - ENTPE

Kevin Credit, Maynooth University

Tomaz Dentinho University of the Azores

Kieran Donaghy, Cornell University

Suzana Dragicevic, Simon Fraser University

Kerry Fang, Florida State University

Elijah Knaap, University of California – Riverside

Karima Kourtit, Open University, Heerlen, Netherlands

Matthew Lehnert, Al Akhawayn University

Sarah Low, University of Illinois at Urbana-Champaign

Yuri Mansury, Illinois Institute of Technology

Alan Murray University of California – Santa Barbara

Peter Nijkamp, Open University, Heerlen

Yasuhide Okuyama University of Kitakyushu

Liliana Perez, Montreal University

Dimitra Pyrialakou, West Virginia University

Neil Reid, University of Toledo

Sergio Rey, University of California – Riverside

Lisa Lorena Losada Rojas, University of Toronto

Adam Rose University of Southern California

Timothy F. Slaper, Indiana University

John Sporing, NARSC

Ran Wei, University of California – Riverside

Stephan Weiler, Colorado State University

Amanda Weinstein, University of Akron

John Winters, Iowa State University

Timothy Wojan, National Science Foundation

Pui Hang Wong, Maastricht University

NARSC Graduate Student Paper Competitions

Committee Co-Chairs

Christa Court, University of Florida

Andre Fernandes Tomon Avelino, U.S. Department of Energy, National Renewable Energy Laboratory

Reading Committee

Mark Brown, Statistics Canada

Yong Chen, Oregon State University

Gary Cornwall, U.S. Bureau of Economic Analysis

Sandy Dall'erba, University of Illinois at Urbana-Champaign

Elham Erfanian, Ohio University

João-Pedro Ferreira, University of Florida

Genevieve Giuliano, University of Southern California

Juan Tomás Sayago Gómez, Universidad Icesi

Nicholas Irwin, University of Nevada, Las Vegas

Orsa Kekezi, Stockholm University

Claudia Montanía, United Nations Development Programme

Amir Borges Ferreira Neto, Florida Gulf Coast University

Bruce Newbold, McMaster University

Rafael Garduno Rivera, Universidad Panamericana

Alberto Franco Solís, University of Extremadura

Renato Schwambach Vieira, University of Sao Paulo, Ribeirao Preto

Shishir Shakya, Shippensburg University of Pennsylvania

Daoqin Tong, Arizona State University

NARSC Council Directory

Voting Members

Bruce Newbold, President

McMaster University

Amanda Ross, Chair and Councilor-at-Large, 2020-2022

University of Alabama

Daoqin Tong, Councilor-at-Large, 2020-2022

Arizona State University

Isabelle Nilsson, Councilor-at-Large, 2021-2023

University of North Carolina at Charlotte

John V. Winters, Councilor-at-Large, 2021-2023

Iowa State University

Ting Zhang, Ph.D. Councilor-at-Large, 2022-2024

University of Baltimore

Biswa Das, Councilor-at-Large, 2022-2024

Iowa State University

Amelia Pludow, Student Representative, 2021-2022

University of California-Santa Barbara

Bruce Newbold, Canadian RSA

McMaster University

Tessa Conroy, Mid-Continent RSA

University of Wisconsin-Madison

Kieran Donaghy, Northeast RSA

Cornell University

Amanda L. Weinstein, Southern RSA

University of Akron

Jaewon Lim, Western RSA

University of Nevada, Las Vegas

Ex-officio (Nonvoting) Members

John Sporing, NARSC Executive Director

Andrea Caragliu, RSAI Executive Director

Politecnico di Milano

Roberta Capello, Editor-in-Chief, Papers in Regional Science
Politecnico di Milano

Isabelle Nilsson, Editor, Regional Science Policy & Practice
University of North Carolina at Charlotte

Neil Reid, Editor and Book Reviews Editor, Regional Science Policy & Practice
University of Toledo

Rosella Nicolini, Editor-in-Chief, Papers in Regional Science
Universitat Autònoma de Barcelona

Tessa Conroy, Editor, Papers in Regional Science
University of Wisconsin-Madison

Eric Delmelle, Editor, Papers in Regional Science
University of North-Carolina at Charlotte

Past and Future Conferences

Detroit, MI	December 27–29, 1954
New York, NY	December 27–30, 1955
Cleveland, OH	December 27–29, 1956
Philadelphia, PA	December 28–30, 1957
Chicago, IL	December 27–29, 1958
Washington, DC	December 27–29, 1959
St. Louis, MO	December 28–30, 1960
New York, NY	December 27–29, 1961
Pittsburgh, PA	December 27–29, 1962
Chicago, IL	November 15–17, 1963
Ann Arbor, MI	November 13–16, 1964
Philadelphia, PA	November 12–14, 1965
Clayton, MO	November 4–6, 1966
Cambridge, MA	November 3–5, 1967
Cambridge, MA	November 8–10, 1968
Santa Monica, CA	November 7–9, 1969
Philadelphia, PA	November 6–8, 1970
Ann Arbor, MI	November 12–14, 1971
Philadelphia, PA	November 10–12, 1972
Atlanta, GA	November 9–11, 1973
Chicago, IL	November 8–10, 1974
Cambridge, MA	November 7–9, 1975
Toronto, Ontario	November 12–14, 1976
Philadelphia, PA	November 11–13, 1977
Chicago, IL	November 10–12, 1978
Los Angeles, CA	November 9–11, 1979
Milwaukee, WI	November 14–16, 1980
Montreal, Quebec	November 13–15, 1981
Pittsburgh, PA	November 12–14, 1982
Chicago, IL	November 11–13, 1983
Denver, CO	November 9–11, 1984
Philadelphia, PA	November 15–17, 1985
Columbus, OH	November 14–16, 1986

Baltimore, MD	November 6–8, 1987
Toronto, Ontario	November 11–13, 1988
Santa Barbara, CA	November 10–12, 1989
Boston, MA	November 9–11, 1990
New Orleans, LA	November 7–11, 1991
Chicago, IL	November 12–14, 1992
Houston, TX	November 11–14, 1993
Niagara Falls, Ontario	November 17–20, 1994
Cincinnati, OH	November 8–13, 1995
Arlington, VA	November 14–17, 1996
Buffalo, NY	November 5–9, 1997
Santa Fe, NM	November 11–14, 1998
Montreal, Quebec	November 11–14, 1999
Chicago, IL	November 9–11, 2000
Charleston, SC	November 15–17, 2001
San Juan, PR	November 14–17, 2002
Philadelphia, PA	November 20–23, 2003
Seattle, WA	November 11–13, 2004
Las Vegas, NV	November 10–12, 2005
Toronto, Ontario	November 15–19, 2006
Savannah, GA	November 7–11, 2007
New York City, NY	November 19–22, 2008
San Francisco, CA	November 19–21, 2009
Denver, CO	November 10–13, 2010
Miami, FL	November 9–12, 2011
Ottawa, Canada	November 7–10, 2012
Atlanta, Georgia	November 13–16, 2013
Washington, DC	November 12–15, 2014
Portland, OR	November 11–14, 2015
Minneapolis, MN	November 9–12, 2016
Vancouver, Canada	November 8–11, 2017
San Antonio, TX	November 7–10, 2018
Pittsburgh, PA	November 13–16, 2019
Virtual Conference	November 9–13, 2020

Denver, CO

November 10-13, 2021

Montreal, QC

November 9-12, 2022

San Diego, CA

November 15 -18, 2023

New Orleans, LA

November 14-16, 2024

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rri.wvu.edu

Founded in 1965, the RRI is an internationally recognized center for the advancement of regional science. The Institute supports interdisciplinary regional research with a focus on the economic and social development of lagging regions. In addition to educational and research opportunities, it also provides a variety of resources such as working papers, technical documents, published research reports, an input-output materials archive, and the Web Book of Regional Science.

In January 2023, we will welcome Dr. Heather Stephens as the newest RRI Director following the retirement of Randy Jackson after more than 20 years of distinguished service.

We hope you will continue to engage with the RRI as we move forward into our next chapter.

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International Journal of Urban Sciences

Aims and scope

International Journal of Urban Sciences (*IJUS*) is an interdisciplinary journal for scientific research and analytical methods on urban and regional studies. *IJUS* welcomes submissions in the areas of planning, transportation, economics, environment and geography, particularly those that consider the spatial context and focus on issues of theory, method, and public policy.

In addition to research articles, *IJUS* accepts insight papers that are expressed in non-traditional formats such as commentaries on urban policy, extended book reviews, interventions to current academic debates, descriptions of major consultancy works, short case studies, and others.

IJUS uses double blind peer review, and the time from submission to decision is normally within 90 days.

Peer Review Integrity

All submitted manuscripts are subject to initial appraisal by the Editor, and, if found suitable for further consideration, to peer review by independent, anonymous expert referees. All peer review is double-blind and submission is online via ScholarOne Manuscripts.

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Instructions to Session Chairs, Presenters, and Discussants

1. Please, adhere to the times printed in the program. Each session presentation is assigned a specific time. If you have a no-show, use the time for a discussion of the proceeding paper(s) or for a recess. Do not shift papers to fill voids, as individuals may want to attend a particular paper.
2. Most sessions have 4 papers. Session Chairs should allocate 30 minutes to each paper (20 minutes presentation, 5 minutes discussant, and 5 minutes for audience questions/comments). If you 3 or 5 papers in your session allocate the time accordingly.
3. Hold each individual to the time allotted. If a speaker continues after time has expired, rise, ask those present to join you in thanking the speaker, and announce the next presentation. The audience and the other speakers will respect and support your decision.
4. Please be considerate of the next session by ensuring your session is completed at the appropriate time and that the virtual meeting room is vacated in time for the next session to set up.
5. Each paper is assigned a discussant to review and offer constructive comments on the paper. There is one discussant for each paper. The discussants for each session are listed in the program. Discussants are listed in sequential order. The first discussant listed is responsible for discussing the first paper presented; the second discussant listed is responsible for discussing the second paper presented etc. Organized sessions may have allocated their discussant differently
6. The discussant should come prepared to provide approximately 5 minutes discussion of the paper. Possible speaking points include its merits and questions' regarding methods, data, or findings – a summary of the paper is neither expected nor appropriate. As a presenter, we ask that you share your paper (or PowerPoint) presentation) with your discussant as early as possible, so that the discussant has sufficient time to review it.

Conference Highlights and Business Meetings

Wednesday, November 9

Python Spatial Analysis Library (PySAL) Workshop [Workshop] Pre-registration required

Wednesday | 8:00 am-5:00 pm | Symphonie 2A

The Regional Science Academy: Advanced Brainstorm Carrefour (ABC) [Special Session]

Wednesday | 8:55 am-5:00 pm | Symphonie 4

Words of Welcome & Isserman Lecture [Special Session]

Wednesday | 7:00 pm-8:00 pm | Grand Salon Opera B

Coming Full Circle: Identifying Issues and Informing Action in Regional Science

Speaker: Sarah Low, University of Illinois-Urbana Champaign

NARSC Icebreaker Reception

Wednesday | 8:00 pm-9:00 pm | Grand Salon Opera Foyer

Thursday, November 10

NARSC Council Meeting (by invitation only) [Business Meeting]

Thursday | 8:00 am-10:00 am | Ovation

RSAI Long Range Planning Committee Meeting (by invitation only) [Business Meeting]

Thursday | 8:00 am-10:00 am | Symphonie 1

NARSC Presidential Lecture [Special Session]

Thursday | 10:30 am-12:30 pm | Grand Salon Opera

Assessing Older Adult Mobility Using Wearable Technology

Speaker: Bruce Newbold, McMaster University

Regional Development II (Session Sponsored by the International Journal of Urban Sciences) [Formal Paper Session]

Thursday | 1:30 pm-3:30 pm | Soprano C

Northeastern RSA Business Meeting (by invitation) [Business Meeting]

Thursday | 4:00 pm-6:00 pm | Ovation

The William Alonso Memorial Prize Lecture [Special Session]

Thursday | 7:00 pm-8:00 pm | Grand Salon Opera

Cultural Heritage and Local Development: A Complex Relationship

Speaker: Silvia Cerisola, Politecnico di Milano

NARSC Thursday Evening Reception

Thursday | 8:00 pm-9:00 pm | Grand Salon Opera Foyer

Friday, November 11

RSAI Council Meeting (by invitation only) [Business Meeting]

Friday | 8:00 am-10:00 am | Ovation

Graduate Student-Authored Paper Competition - Finalists

Friday | 10:30 am-12:30 pm | Symphonie 3B

SRSA Business Meeting (invitation only) [Business Meeting]

Friday | 12:30 pm-2:00 pm | Ovation

Graduate Student-Led Paper Competition - Finalists [Special Session]

Friday | 1:30 pm-3:30 pm | Symphonie 3B

Diversity Initiatives in Regional Science [Panel]

Friday | 1:30 pm-3:30 pm | Soprano B

NARSC Diversity & Inclusion Committee Annual Lecture [Special Session]

Friday | 4:00 pm-6:00 pm | Symphonie 3B

The Impacts of COVID-19 on Food Access

Speaker: Daoqin Tong, Arizona State University

Publishing in Regional Science: Emerging Scholars Committee Panel Discussion [Panel]

Friday | 4:00 pm-6:00 pm | Symphonie 7

Great Minds in Regional Science [Special Session]

Friday | 5:30 pm-6:15 pm | Soprano C

Saturday, November 12

Honoring and Celebrating Arthur Getis: A LEGEND in Spatial Analysis I [Special Session]

Saturday | 8:00 am-10:00 am | Soprano C

Honoring and Celebrating Arthur Getis: A LEGEND in Spatial Analysis II [Special Session]

Saturday | 10:30 am-12:30 pm | Soprano C

Papers in Regional Science Lecture [Special Session]

Saturday | 10:30 am-12:30 pm | Symphonie 3B

The Impacts of More Severe Weather Events on Housing Markets

Amanda Ross, University of Alabama

Discussant: Edward Coulson, University of California - Irvine

NARSC Awards Luncheon [Business Meeting]

Saturday | 12:30 pm-2:30 pm | Soprano A/B



THE NORTH AMERICAN REGIONAL SCIENCE COUNCIL

Isserman Lecture

Wednesday, November 9

7:00PM-8:00PM

Room: Grand Salon Opera B

Coming Full Circle: Identifying Issues and Informing Action in Regional Science

Sarah Low, University of Illinois-Urbana Champaign



Chair: Alan Murray, University of California-Santa Barbara



THE NORTH AMERICAN REGIONAL SCIENCE COUNCIL

NARSC Presidential Lecture

Thursday, November 10

10:30AM-12:30PM

Room: Grand Salon Opera

Assessing Older Adult Mobility Using Wearable Technology

Bruce Newbold, McMaster University



Chair: Steve Deller, University of Wisconsin-Madison



THE NORTH AMERICAN REGIONAL SCIENCE COUNCIL

The William Alonso Memorial Prize Lecture

Thursday, November 10

7:00PM-8:00PM

Room: Grand Salon Opera

Cultural Heritage and Local Development: A Complex Relationship

Silvia Cerisola, Politecnico di Milano





THE NORTH AMERICAN REGIONAL SCIENCE COUNCIL

NARSC Diversity & Inclusion Committee Annual Lecture

Friday, November 11

4:00PM-6:00PM

Room: Symphonie 3B

The Impacts of COVID-19 on Food Access

Daoqin Tong, Arizona State University





THE NORTH AMERICAN REGIONAL SCIENCE COUNCIL

Papers in Regional Science Annual Lecture

Saturday, November 12

10:30AM-12:30PM

Symphonie 3B

The Impacts of More Severe Weather Events on Housing Markets

Amanda Ross, University of Alabama



Discussant: Edward Coulson, University of California – Irvine

WEDNESDAY, NOVEMBER 9

1. Python Spatial Analysis Library (PySAL) Workshop [Workshop – Pre-Registration Required] Wednesday | 8:00 am-5:00 pm | Symphonie 2A

- *Python Spatial Analysis Library (PySAL) Workshop.....*Elijah Knapp, University of California - Riverside; Sergio Rey, University of California - Riverside

2. The Regional Science Academy: Advanced Brainstorm Carrefour (ABC) - Words of Welcome [Special Session] Wednesday | 9:25 am-9:30 am | Symphonie 4

3. The Regional Science Academy ABC - Session I [Special Session] Wednesday | 9:30 am-10:45 am | Symphonie 4

Organizers: Louafi Bouzouina, ENTPE; Pui Hang Wong, Maastricht University; Karima Kourtit, Open University, The Netherlands; Peter Nijkamp, Open University, Heerlen, The Netherlands; Tomás Lopes Cavalheiro Ponce Dentinho, Universidade dos Açores; Neil Reid, University of Toledo

President: Peter Nijkamp, Open University, Heerlen, The Netherlands

- New Development in the Corona Dashboard Including Mobility, Peter Nijkamp and Karima Kourtit
- COVID-19 and Income Profile: How Communities in the United States Responded to Mobility Restrictions at Early-pandemic Stage, Qianqian Sun, Weiyi Zhou, Aliakbar Kabiri, Aref Darzi, Songhua Hu, Hannah Younes, Lei Zhang

4. The Regional Science Academy ABC - Session II [Special Session] Wednesday | 10:45 am-12:45 pm | Symphonie 4

Organizers: Louafi Bouzouina, ENTPE; Pui Hang Wong, Maastricht University; Karima Kourtit, Open University, The Netherlands; Peter Nijkamp, Open University, Heerlen, The Netherlands; Tomás Lopes Cavalheiro Ponce Dentinho, Universidade dos Açores; Neil Reid, University of Toledo

President: Jaewon Lim, University of Nevada - Las Vegas

- Which factors influence mobility change during COVID-19 in Germany? Evidence from German county data, Andree Ehlert and Jan Wedemeier
- Will the COVID-19 hinder or aid the transition to sustainable urban mobility? Spotlight on Portugal's largest urban agglomeration, Patricia Melo
- Evolution of urban mobility behaviour in Brussels as a result of the COVID-19 pandemic, Alice de Séjournet, Cathy Macharis, Sara Marie Tori, and Lieselot Vanhaverbeke
- What drives the changes in public transport use in the context of the Covid-19 pandemic? Highlights from Lyon metropolitan area, Ali El Zein, Adrien Beziat, Pascal Pochet, Olivier Klein and Stephanie Vincent

5. The Regional Science Academy ABC - Session III-A [Special Session]
Wednesday | 1:30 pm-3:30 pm | Symphonie 4

Organizers: Louafi Bouzouina, ENTPE; Pui Hang Wong, Maastricht University; Karima Kourtit, Open University, The Netherlands; Peter Nijkamp, Open University, Heerlen, The Netherlands; Tomás Lopes Cavalheiro Ponce Dentinho, Universidade dos Açores; Neil Reid, University of Toledo

Presider: Tomás Lopes Cavalheiro Ponce Dentinho, Universidade dos Açores

- Behaviour and route choice of cyclists in corona times: modelling Snifferbike experiments in the Netherlands, John Östh, Umut Türk, Karima Kourtit and Peter Nijkamp
- The increase in online shopping during COVID-19: Who is responsible, will it last, and what does it mean for cities, Mischa Young, Jaime Soza-Parra and Giovanni Circella
- Browsing for food: Will COVID-induced on-line grocery delivery persist?, Hannah Younes, Robert B. Noland and Wenwen Zhang
- On the bumpy road to recovery: resilience of transit ridership during COVID-19 in 15 European cities, Ouassim Manout, Louafi Bouzouina, Karima Kourtit and Peter Nijkamp

6. The Regional Science Academy ABC - Session III-B [Special Session]
Wednesday | 3:45 pm-5:00 pm | Symphonie 4

Organizers: Louafi Bouzouina, ENTPE; Pui Hang Wong, Maastricht University; Karima Kourtit, Open University, The Netherlands; Peter Nijkamp, Open University, Heerlen, The Netherlands; Neil Reid, University of Toledo; Tomás Lopes Cavalheiro Ponce Dentinho, Universidade dos Açores

Presider: Tomás Lopes Cavalheiro Ponce Dentinho, Universidade dos Açores

- Residential preferences, telework perceptions, and the intention to telework: insights from the Lisbon Metropolitan Area during the COVID-19 pandemic, João De Abreu e Silva
- Detecting and measuring spatial spillover effects and heterogeneity using interpretable tree-based machine learning approaches: an illustration using the Boston housing dataset, Guney Celbis, Pui Hang Wong, Karima Kourtit and Peter Nijkamp
- Concluding words by Peter Nijkamp and Peter Batey

Registration

Wednesday | 4:00 pm-8:00 pm | Soprano-Foyer

Words of Welcome & Isserman Lecture [Special Session]

Wednesday | 7:00 pm-8:00 pm | Grand Salon Opera B

Organizer: John Spring, NARSC

Presider: Alan Murray, University of California - Santa Barbara

- *Coming Full Circle: Identifying Issues and Informing Action in Regional Science.....* Sarah Low, University of Illinois at Urbana-Champaign

NARSC Icebreaker Reception [Informal meeting]
Wednesday | 8:00 pm-9:00 pm | Grand Salon Opera Foyer

THURSDAY, NOVEMBER 10

Coffee [Informal meeting]rsday | 7:30 am-8:30 am | Soprano Foyer

Registration & Exhibits
Thursday | 7:30 am-5:30 pm | Soprano-Foyer

NARSC Council Meeting (by invitation only) [Business Meeting]
Thursday | 8:00 am-10:00 am | Ovation

RSAl Long Range Planning Committee Meeting (by invitation only) [Business Meeting]
Thursday | 8:00 am-10:00 am | Symphonie 1

7. Housing I: The Impact of Proximity [Formal Paper Session]
Thursday | 8:00 am-10:00 am | Soprano B

Presider: Elijah Knaap, University of California - Riverside

- *Close competition: The contagion effect of neighborhood listings on seller motivation.....*Mitchell Livy, California State University - Fullerton; Nicholas Irwin, University of Nevada - Las Vegas
- *The impact of affordable housing developments on the values of nearby residential properties.....*Amanda Liddle, Colorado Department of Health Care Policy and Financing; Jeffrey Zax, University of Colorado - Boulder
- *Segregated by Design? The Effect of Street Network Topological Structure on the Measurement of Residential Segregation.....*Elijah Knaap, University of California - Riverside; Sergio Rey, San Diego State University

Discussants:

- Elijah Knaap, University of California - Riverside
- Mitchell Livy, California State University - Fullerton
- Jeffrey Zax, University of Colorado - Boulder

8. Regional/Rural Development I - Rural Health Disparities [Formal Paper Session]
Thursday | 8:00 am-10:00 am | Symphonie 3A

Organizers: Sarah Low, University of Illinois at Urbana-Champaign; Stephan Weiler, Colorado State University

Presider: Kelsey Conley, U.S. Department of Agriculture

- *The Growing Rural Health Disadvantage: The Importance of Changes in Health Behavior.....*David McGranahan, U.S. Department of Agriculture; Elizabeth Dobis, USDA Economic Research Service

- *Rural Labor Market Consequences of Rising Prime-Age Mortality*.....Sarah Low, University of Illinois at Urbana-Champaign; Mark White, University of Missouri; Andrew Van Leuven, Oklahoma State University
- *Changing Markets for Pharmacies Across the Rural-Urban Divide*.....Melissa Kono, University of Wisconsin - Madison; Steven Deller, University of Wisconsin - Madison
- *Changes in Rural Health Care Access, 2000-18*.....Elizabeth Dobis, USDA Economic Research Service
- *Minding the Gap: Decomposing Rural-Urban Differences in Prime Working Age Natural Cause Mortality*.....Kelsey Conley, U.S. Department of Agriculture

Discussants:

- Kelsey Conley, U.S. Department of Agriculture
- Elizabeth Dobis, USDA Economic Research Service
- David McGranahan, U.S. Department of Agriculture
- Sarah Low, University of Illinois at Urbana-Champaign
- Melissa Kono, University of Wisconsin - Madison

9. Rural Innovation from Three Perspectives: Case Study, Microdata, and Meso-level [Special Session]

Thursday | 8:00 am-10:00 am | Soprano A

Organizer: Timothy Wojan, National Science Foundation

Presider: Stephan Goetz, Pennsylvania State University

- *Innovation in Rural Areas: Examples from Canada and the United States*.....David Freshwater, OECD
- *Is User Entrepreneurship More Inclusive Entrepreneurship? Evidence from Two Micro Datasets*.....Luyi Han, Pennsylvania State University; Zheng Tian, Pennsylvania State University; Timothy Wojan, National Science Foundation; Anil Rupasingha, Economic Research Service; Stephan Goetz, Pennsylvania State University
- *Effects of Cloud Services Adoption on Innovation: Evidence from the Annual Business Survey*.....Luyi Han, Pennsylvania State University; Timothy Wojan, National Science Foundation; Stephan Goetz, Pennsylvania State University
- *SAIRE sans Satire? The Promise and Perils of Small Area Innovation Rate Estimation*.....Zheng Tian, Pennsylvania State University; Luyi Han, Pennsylvania State University; Timothy Wojan, National Science Foundation; Stephan Goetz, Pennsylvania State University

Discussants:

- Stephan Goetz, Pennsylvania State University
- Heather Stephens, West Virginia University
- Brian Whitacre, Oklahoma State University
- Mark Brown, Statistics Canada

10. Regional Development I [Special Session]

Thursday | 8:00 am-10:00 am | Soprano C

President: Roberto Dellisanti, Politecnico di Milano

- *Do People Follow Jobs or Do Jobs Follow People? A China-based Study.....*Wenzheng Li, Cornell University; John Carruthers, Cornell University
- *Religious Diversity and Economic Performance In Brazilian Municipalities: Analysis based on Weber's work ethics.....*Suzana Quinet Bastos, Federal University of Juiz de Fora; Sandro de Freitas Ferreira, Federal University of Juiz de Fora; Gabryella Magalhães Cerqueira Silva, Federal University of Juiz de Fora
- *CCIs and local economic growth nexus: Territorial mediating factors.....*Roberto Dellisanti, Politecnico di Milano

Discussants:

- Roberto Dellisanti, Politecnico di Milano
- Wenzheng Li, Cornell University
- Suzana Quinet Bastos, Federal University of Juiz de Fora

11. COVID-19 pandemic, transportation, and impacts on urban areas. [Special Session]

Thursday | 8:00 am-10:00 am | Symphonie 2A

Organizers: Dimitra Pyrialakou, West Virginia University; Lisa Lorena Losada Rojas, University of Toronto; Eleni Bardaka, North Carolina State University

Presiders: Eleni Bardaka, North Carolina State University; Lisa Lorena Losada Rojas, University of Toronto;

- *Could urban form moderate mental distress due to the COVID-19 pandemic? Evidence from Jakarta, Indonesia.....*Usep Nugraha, Universitas Indonesia; Budy P. Resosudarmo, Australian National University; Rus'an Nasrudin, Universitas Indonesia
- *Examining COVID-19 Vaccine Access Profiles through Spatial Microsimulation and Activity Allocation.....*Joseph Tuccillo, Oak Ridge National Laboratory; James Gaboardi, Oak Ridge National Laboratory
- *COVID-19 and Commuting: Evidence from California's San Francisco Bay and Central Valley Regions.....*Bonnie Wang, University of Southern California; Seva Rodnyansky, Occidental College; Marlon Boarnet, University of Southern California; Andre Comandon, University of Southern California
- *Travel Disparity in the Bipartite Commute Network during the COVID-19 Pandemic: A case of Seoul.....*Jaegeon Lee, Seoul National University; Jungyul Sohn, Seoul National University

Discussants:

- Joseph Tuccillo, Oak Ridge National Laboratory
- Bonnie Wang, University of Southern California
- Jaegeon Lee, Seoul National University
- Usep Nugraha, Universitas Indonesia

Panelists:

- Usep Nugraha, Universitas Indonesia
- Joseph Tuccillo, Oak Ridge National Laboratory
- Bonnie Wang, University of Southern California
- Jaegeon Lee, Seoul National University

Coffee [Informal meeting]

Thursday | 10:00 am-10:30 am | Soprano Foyer

12. NARSC Presidential Lecture [Special Session]

Thursday | 10:30 am-12:30 pm | Grand Salon Opera

Presider: Steven Deller, University of Wisconsin - Madison

- *Assessing Older Adult Mobility Using Wearable Technology.....*Bruce Newbold, McMaster University

13. Housing II: Residential Property Values [Formal Paper Session]

Thursday | 1:30 pm-3:30 pm | Soprano B

Presider: Mitchell Livy, California State University - Fullerton

- *Do residential property tax incentive programs raise home prices and contribute to gentrification? Quasi-experimental evidence from Columbus, Ohio.....*Nick Messenger, Ohio State University
- *Did Unilateral Divorce raise house prices in Europe?.....*Rafael González-Val, Universidad de Zaragoza; Miriam Marcén, Universidad de Zaragoza
- *Measuring the Value of Urban Forestry in the Housing Market in Seattle, WA.....*Hanxue Wei, Cornell University
- *Who values urban open spaces? Investigating heterogeneity in capitalization of open space by housing type, open space class, and demographics.....*Mitchell Livy, California State University - Fullerton; Liqing Li, California State University - Fullerton

Discussants:

- Mitchell Livy, California State University - Fullerton
- Nick Messenger, Ohio State University
- Rafael González-Val, Universidad de Zaragoza
- Hanxue Wei, Cornell University

14. Regional Development II (Session Sponsored by the International Journal of Urban Sciences) [Formal Paper Session]

Thursday | 1:30 pm-3:30 pm | Soprano C

Presider: Andrea Ascani, Gran Sasso Science Institute (GSSI)

- *Capital Shocks and the Effects of the Global Financial Crisis in European Regions and Cities.....*Michiel Daams, University of Groningen; Philip McCann, University of Manchester; Paolo Veneri, OECD; Richard Barkham, CBRE Global Investors
- *Spatial Spillovers and Displacement Effects in Cohesion Policy: Evidence from Italian NUTS-3 regions.....*Debora Gambina, University of Palermo; Fabio Mazzola, University of Palermo
- *Digital transformations, global value chains, and regional growth in Europe: The MASST5 model.....*Roberta Capello, Politecnico di Milano; Andrea Caragliu, Politecnico di Milano
- *Networked FDI, spillovers and regional innovation capacity.....*Andrea Ascani, Gran Sasso Science Institute (GSSI); Luca Bettarelli, University of Milan Bicocca; Laura Resmini, University of Milan Bicocca

Discussants:

- Andrea Ascani, Gran Sasso Science Institute (GSSI)
- Michiel Daams, University of Groningen
- Fabio Mazzola, University of Palermo
- Andrea Caragliu, Politecnico di Milano

15. Natural Resources and Climate Change [Formal Paper Session]

Thursday | 1:30 pm-3:30 pm | Symphonie 1

Presider: Flavia Chein, Federal University of Juiz de Fora

- *The impact of the Mariana and Brumadinho dam disasters on credit constraint.....*Wilson Neto, UFJF; Flavia Chein, Federal University of Juiz de Fora
- *Peer Effects on Climate Change Beliefs.....*Xialing Zhao, Pennsylvania State University; Linlin Fan, Pennsylvania State University; Yilan Xu, University of Illinois - Urbana-Champaign
- *Just Clean Air.....*Gina Yeonkyeong Park, Cornell University
- *Analysis of local energy supply and demand for woody biomass in Japanese municipalities.....*Kazuyoshi Nemoto, Tohoku University; Toshihiko Nakata, Tohoku University

Discussants:

- Kazuyoshi Nemoto, Tohoku University
- Gina Yeonkyeong Park, Cornell University
- Yilan Xu, University of Illinois - Urbana-Champaign
- Flavia Chein, Federal University of Juiz de Fora

16. Regional/Rural Development II - Rural Resilience [Formal Paper Session]

Thursday | 1:30 pm-3:30 pm | Symphonie 3A

Organizers: Sarah Low, University of Illinois at Urbana-Champaign; Stephan Weiler, Colorado State University

President: Tomás Lopes Cavalheiro Ponce Dentinho, Universidade dos Açores

- *Learning about rural community resilience and capacity from municipal actions during the COVID-19 pandemic.....*Kathleen Bell, University of Maine; Vanessa Levesque, University of Southern Maine; Eileen Johnson, Bowdoin College
- *Exploring a new tourism asset in the context of rural economic development; the case of Fishers Peak State Park.....*Skyler Schuck, Colorado State University
- *Mapping Environmental Hazards Adaptation Capacity and Vulnerability in Timor Leste.....*Tomás Lopes Cavalheiro Ponce Dentinho, Universidade dos Açores; Karina Sass, Universidade dos Açores; Fabiana Issler, EBD Global Optimum

Discussants:

- Tomás Lopes Cavalheiro Ponce Dentinho, Universidade dos Açores
- Kathleen Bell, University of Maine
- Skyler Schuck, Colorado State University

17. Diversity, Inclusion, Intolerance, & Protest [Formal Paper Session]

Thursday | 1:30 pm-3:30 pm | Symphonie 4A

President: Laurie Schintler, George Mason University

- *Knocking on Hell's door: dismantling hate with cultural consumption.....*Daria Denti, Gran Sasso Science Institute
- *The perception of human security and human rights by Mexiquen's migrants in Canada participating in the SAWP: an exploratory study 2020.....*Lidia Carvajal, Universidad Autonoma del Estado de Mexico; Román Sánchez, Universidad Autónoma del Estado de México; Oswaldo Garcia-Salgado, Universidad Autonoma del Estado de Mexico
- *Geography of contestation: a study on the Yellow Vests movement and the rise of populism in France.....*Torre Andre, University Paris Saclay; Sébastien Bourdin, E.M Normandie
- *Diversity and Inclusion in Regional Science Participation: A Bibliometric Perspective.....*Laurie Schintler, George Mason University; Chen Zhenhua, Ohio State University

Discussants:

- Laurie Schintler, George Mason University
- Daria Denti, Gran Sasso Science Institute
- Lidia Carvajal, Universidad Autonoma del Estado de Mexico
- Torre Andre, University Paris Saclay

18. Labor & Firm Productivity [Formal Paper Session]

Thursday | 1:30 pm-3:30 pm | Symphonie 4B

Presider: Katarzyna Kopczewska, University of Warsaw

- *Can't Stand the Heat: Climate Stress and Labor Productivity in 16 Latin American and Caribbean Countries.....*Luis Quintero, Johns Hopkins University; Hanchen Jiang, University of North Texas
- *Quantification of non-linear effects in agglomeration economies for transport appraisals.....*Anupriya - Imperial College London; Daniel Graham, Imperial College London; Prateek Bansal, National University of Singapore
- *The spatial dimension of aging and growth.....*Rosella Nicolini, Universitat Autònoma de Barcelona; José Luis Roig Sabaté, Universitat Autònoma de Barcelona
- *Economies of density vs economies of agglomeration – supplementing matching, learning and sharing with attracting mechanism.....*Katarzyna Kopczewska, University of Warsaw; Mateusz Kopyt, University of Warsaw

Discussants:

- Katarzyna Kopczewska, University of Warsaw
- Luis Quintero, Johns Hopkins University
- Anupriya - Imperial College London
- Rosella Nicolini, Universitat Autònoma de Barcelona

19. Access to opportunities and amenities [Special Session]

Thursday | 1:30 pm-3:30 pm | Symphonie 2A

Organizers: Lisa Lorena Losada Rojas, University of Toronto; Dimitra Pyrialakou, West Virginia University; Eleni Bardaka, North Carolina State University

Presider: Yue Ke, Argonne National Laboratory

- *A historical collection of impedance functions for active travel accessibility analysis in Canada.....*Mahdis Moghadasi, McMaster University; Antonio Paez, McMaster University
- *Older Drivers in the Rural West.....*Yue Ke, Argonne National Laboratory; Brigitte Waldorf, Purdue University
- *A renewed argument for walkable school accessibility.....*Anastasia Soukhov, McMaster University; Antonio Paez, McMaster University; Christopher Higgins, University of Toronto - Scarborough; Moataz Mohamed, McMaster University
- *Cities in shape: Assessing the impact of urban morphology on accessibility to urban amenities.....*Clara Peiret-Garcia, Newcastle University

Discussants:

- Mahdis Moghadasi, McMaster University
- Yue Ke, Argonne National Laboratory
- Anastasia Soukhov, McMaster University
- Clara Peiret-Garcia, Newcastle University

Panelists:

- Yue Ke, Argonne National Laboratory
- Anastasia Soukhov, McMaster University
- Clara Peiret-Garcia, Newcastle University
- Mahdis Moghadasi, McMaster University

Coffee [Informal meeting]

Thursday | 3:30 pm-4:00 pm | Soprano Foyer

20. Work Location & Commuting [Formal Paper Session]

Thursday | 4:00 pm-6:00 pm | Soprano A

President: Diego Andres Cardenas Morales, Laval University

- *The work-from-home revolution and the performance of cities.....* Steven Bond-Smith, University of Hawaii - Manoa; Philip McCann, University of Manchester
- *The Problem Has Existed over Endless Years: Racialized Difference in Commuting, 1980–2019.....* devin michelle bunten, Massachusetts Institute of Technology; Ellen Fu, University of Pennsylvania; Lyndsey Rolheiser, University of Connecticut; Christopher Severen, Federal Reserve Bank of Philadelphia
- *What future for office space? An analysis of the relocation of knowledge-intensive business services in the Montréal metropolitan area.....* Diego Andres Cardenas Morales, Laval University; Jean Dube, Universite Laval; Richard Shearmur, McGill University
- *Remote Work and Locational Preferences - The Case of Italy.....* Thea Jansen, Gran Sasso Science Institute (GSSI); Andrea Ascani, Gran Sasso Science Institute (GSSI); Alessandra Faggian, Gran Sasso Science Institute (GSSI); Alessandro Palma, Gran Sasso Science Institute (GSSI)
- *Who continues to work from home and where are they?.....* Ting Zhang, University of Baltimore

Discussants:

- Ting Zhang, University of Baltimore
- Steven Bond-Smith, University of Hawaii - Manoa
- Christopher Severen, Federal Reserve Bank of Philadelphia
- Diego Andres Cardenas Morales, Laval University
- Thea Jansen, Gran Sasso Science Institute (GSSI)

21. Regional Development III [Formal Paper Session]
Thursday | 4:00 pm-6:00 pm | Soprano C

Presider: Hector Nuñez, Banco de México

- *Political Competition and Industrial Location during the Economic Shift in Indonesia.....*Khoirunurrofik Khoirunurrofik, University of Indonesia; Alfred M. Wu, National University of Singapore
- *Effect of greenhouse gas emissions on the regional technical efficiency of the manufacturing sector in Mexico.....*Hector Nuñez, Banco de México
- *Persistence and change of regional entrepreneurial activity in U.S. cities.....*Haifeng Qian, University of Iowa
- *"Hybrid urbanization", labor market extensions and potentials for rural development.....*Hans Westlund, KTH Royal Institute of Technology

Discussants:

- Hans Westlund, KTH Royal Institute of Technology
- Khoirunurrofik Khoirunurrofik, University of Indonesia
- Hector Nuñez, Banco de México
- Haifeng Qian, University of Iowa

22. Fertility: Trends, Decision Making & Impacts [Formal Paper Session]
Thursday | 4:00 pm-6:00 pm | Symphonie 1

Presider: Flavia Chein, Federal University of Juiz de Fora

- *Fertility Divergence across Large and Small Areas.....*Xiaoyin Li, Iowa State University; John Winters, Iowa State University
- *Regional Childcare Policy, Urbanization, and Population Dynamics.....*Hiroyuki Hashimoto, University of Hyogo; Tohru Naito, Doshisha University
- *Brumadinho Dam failure, the selection mechanism in utero and effects on human capital.....*Igor Vieira Procópio, Federal University of Juiz de Fora; Flavia Chein, Federal University of Juiz de Fora; Cristine Pinto, Insper

Discussants:

- Flavia Chein, Federal University of Juiz de Fora
- John Winters, Iowa State University
- Michael Betz, Ohio State University
- Tohru Naito, Doshisha University

23. Freight & Trade [Formal Paper Session]
Thursday | 4:00 pm-6:00 pm | Symphonie 2A

Presider: Santiago Pinto, Federal Reserve Bank of Richmond

- *The impact of temporal and geographical factors on shippers batch size decisions : a micro-econometrical analysis using data collected over three periods of time.....*el mehdi aboukacem, Gustave Eiffel University
- *Distance Friction and the Hub-and-Spoke System in the Global Freight Transportation.....*Paul Jung, Inha University; Jean-Claude Thill, University of North Carolina - Charlotte
- *Import competition and domestic transport costs.....*Andrea Caragliu, Politecnico di Milano; Michiel Gerritse, Erasmus University Rotterdam
- *It's the Exporters, Stupid! Local Interests and the Political Economy of Trade.....*Santiago Pinto, Federal Reserve Bank of Richmond; Pablo Pinto, University of Houston; Kishore Gawande, University of Texas - Austin

Discussants:

- Santiago Pinto, Federal Reserve Bank of Richmond
- el mehdi aboukacem, Gustave Eiffel University
- Paul Jung, Inha University
- Andrea Caragliu, Politecnico di Milano

24. Regional/Rural Development III - Manufacturing & Occupation [Formal Paper Session]
Thursday | 4:00 pm-6:00 pm | Symphonie 3A

Organizers: Sarah Low, University of Illinois at Urbana-Champaign; Stephan Weiler, Colorado State University

Presider: Timothy F. Slaper, Indiana University

- *Identifying Occupational Gaps by Region: Using FDI and Occupation Co-location as Warning Signs.....*Timothy F. Slaper, Indiana University
- *The Impact of Rurality, Age, and Occupation on the Gender Wage Gap in the U.S.....*Ayoung Kim, Mississippi State University; Brigitte Waldorf, Purdue University
- *Regional Workforce Training as a Common Pool Resource: Evidence from Ohio's Manufacturing Sector.....*Edward Hill, Ohio State University; Ken Poland, Ohio State University

Discussants:

- Edward Hill, Ohio State University
- Timothy F. Slaper, Indiana University
- Ayoung Kim, Mississippi State University

25. Transportation: Infrastructure & Connectivity [Formal Paper Session]

Thursday | 4:00 pm-6:00 pm | Symphonie 4A

Presider: Daniel Hörcher, Imperial College London

- *Highway Congestion in Britain: The effect of transportation improvements.....*Miquel-Angel Garcia-Lopez, Universitat Autònoma de Barcelona; Luz Yadira Gomez-Hernandez, Universitat Autònoma de Barcelona; Rosa Sanchis-Guarner H, University of Barcelona
- *Analysis of Public-Private Partnership and Conventional Projects in Surface Transportation Infrastructure on Long-term Operations and Maintenance (O&M).....*Marina Manganaris, George Mason University; Jonathan Gifford, George Mason University
- *Optimal intercity connectivity: A general equilibrium model with explicit leisure and business travel markets.....*Daniel Hörcher, Imperial College London; Daniel Graham, Imperial College London

Discussants:

- Daniel Hörcher, Imperial College London
- Luz Yadira Gomez-Hernandez, Universitat Autònoma de Barcelona
- Marina Manganaris, George Mason University

26. Tax Policies & Practices [Formal Paper Session]

Thursday | 4:00 pm-6:00 pm | Symphonie 4B

Presider: Elham Erfanian, Ohio University

- *Temporal versus Spatial Specificity in Tax Incentives Program Evaluations: The Case of Wisconsin's Enterprise Zone Program.....*Richard Funderburg, University of Illinois Springfield
- *The spatial effects of selected hydrocarbon-focused environmental policies in Canada.....*HAKAN ANDIC, Statistics Canada
- *Fuel Economy Standards and Public Transport.....*Julius Berger, ifo Institute; Waldemar Marz, ifo Institute
- *Evaluating the impact of power plant closures on educational outcomes in Ohio.....*Elham Erfanian, Ohio University; Fahad Alzahrani, King Faisal University; G. Jason Jolley, Ohio University

Discussants:

- Elham Erfanian, Ohio University
- Richard Funderburg, University of Illinois Springfield
- HAKAN ANDIC, Statistics Canada
- Waldemar Marz, ifo Institute

27. Northeastern RSA Business Meeting (by invitation) [Business Meeting]

Thursday | 4:00 pm-6:00 pm | Ovation

Presiders: John Carruthers, Cornell University; Heather Stephens, West Virginia University;

**28. The William Alonso Memorial Prize Lecture [Special Session]
Thursday | 7:00 pm-8:00 pm | Grand Salon Opera**

Organizer: John Spring, NARSC

President: Janet Kohlhase, University of Houston

- *Cultural Heritage and Local Development: A Complex Relationship.....*Silvia Cerisola, Politecnico di Milano

**NARSC Thursday Evening Reception [Informal meeting]
Thursday | 8:00 pm-9:00 pm | Grand Salon Opera Foyer**

FRIDAY, NOVEMBER 11

**Coffee [Informal meeting]
Friday | 7:30 am-8:30 am | Soprano Foyer**

**Registration & Exhibits
Friday | 7:30 am-5:30 pm | Soprano-Foyer**

**29. Retail: Challenges & Changes [Formal Paper Session]
Friday | 8:00 am-10:00 am | Maestro**

President: Cédric Brunelle, INRS-UCS

- *The Effect of Street Connectivity on Sales Revenue of Retail Area: Focusing on Major Retail Areas in Seoul, South Korea.....*Ahyoung Chang, University of Seoul; Myounggu Kang, University of Seoul
- *Commerce and e-commerce in the face of crisis: Urban retail at a crossroad?.....*Dalit Harel, The Hebrew University of Jerusalem; Sigal Kaplan, The Hebrew University of Jerusalem; Gillad Rosen, The Hebrew University of Jerusalem
- *Shopping Streets, Regional Malls, and Big-box Stores: Shopping Destination Choice by Retail Destination Type in the Montreal Metropolitan Area, 2003–2018.....*Cédric Brunelle, INRS-UCS; Roman Brugières, ENSAI; Alex Rodriguez-Campbell, Laval University; Jean Dube, Université Laval; Nicolas Devaux, Université du Québec à Rimouski

Discussants:

- Cédric Brunelle, INRS-UCS
- Ahyoung Chang, University of Seoul
- Dalit Harel, The Hebrew University of Jerusalem

30. Climate Change II: Impacts and Adaptation [Formal Paper Session]

Friday | 8:00 am-10:00 am | Soprano B

Presider: Yilan Xu, University of Illinois - Urbana-Champaign

- *Climate Migration in the Face of Armed Conflict: Reflections on the Role of Adaptation in Environmental Security*.....Hyun Kim, Chungnam National University
- *Regional effects of climate change*.....Luca Bettarelli, University of Milan Bicocca; Davide Furceri, International Monetary Fund; Fabio Mazzola, University of Palermo; Pietro Pizzuto, University of Palermo
- *Does Climate Change News Inform Flood Insurance Take-up?*.....Yi Huang, Nanjing Audit University; Yilan Xu, University of Illinois - Urbana-Champaign
- *Assessing the impact of Red Tide Events on property values in Southwest Florida*.....Bijeta Bijen Saha, University of Florida; Xiaohui Qiao, University of Florida; Christa Court, University of Florida; Olesya Savchenko, University of Florida

Discussants:

- Bijeta Bijen Saha, University of Florida
- Hyun Kim, Chungnam National University
- Fabio Mazzola, University of Palermo
- Yilan Xu, University of Illinois - Urbana-Champaign

31. Perspectives on GeoComputation Approaches for Urban and Regional Systems I [Formal Paper Session]

Friday | 8:00 am-10:00 am | Symphonie 1

Organizers: Liliana Perez, Montreal University; Suzana Dragicevic, Simon Fraser University

Presiders: Liliana Perez, Montreal University; Emma Von Hoene, George Mason University; Suzana Dragicevic, Simon Fraser University;

- *Improving ABM simulations of Mobility using Cost surfaces, Behavioural and Visual models*.....Raja Sengupta, McGill University
- *Network and ABM models of SARS-CoV-2*.....Kinda Al Sayed, Carleton University; Dipto Sarkar, Carleton University; Paul Holloway, University College Cork
- *Integrating Behavioral Theories and Agent-based Models of Disease Spread*.....Emma Von Hoene, George Mason University; Taylor Anderson, George Mason University

Discussants:

- Emma Von Hoene, George Mason University
- Raja Sengupta, McGill University
- Kinda Al Sayed, Carleton University

32. Methods in Regional Science I [Formal Paper Session]

Friday | 8:00 am-10:00 am | Symphonie 2A

President: Ge Lin, Hong Kong University of Science and Technology

- *Linking Spatial Associations and Permutation Tests to Statistical Models.....*Tong Zhang, Purdue University; Ge Lin, Hong Kong University of Science and Technology
- *The economic and demographic impacts of Covid-19 on Portuguese municipalities.....*Karina Sass, Universidade dos Açores; Tomás Lopes Cavalheiro Ponce Dentinho, Universidade dos Açores
- *Tourism and the Trade in Value-Added: Evidence from Spain.....*Philip Watson, University of Idaho; Antonio Gomez, Universidad Pública de Navarra

Discussants:

- Philip Watson, University of Idaho
- Ge Lin, Hong Kong University of Science and Technology
- Karina Sass, Universidade dos Açores

33. Regional/Rural Development IV - Windmills & Weed [Formal Paper Session]

Friday | 8:00 am-10:00 am | Symphonie 3A

Organizers: Sarah Low, University of Illinois at Urbana-Champaign; Stephan Weiler, Colorado State University

President: Jason Brown, Federal Reserve Bank of Kansas City

- *Household energy transition in rural China: trends and challenges.....*Xiang Zhang, McGill University; Chris Barrington-Leigh, McGill University; Brian Robinson, McGill University
- *A 'Significant Crisis and Financial Windfall': The Proliferation of Medical Marijuana in Rural Oklahoma.....*Brian Whitacre, Oklahoma State University; Andrew Van Leuven, Oklahoma State University
- *The Effects of Recreational Marijuana Legalization on State Economies.....*Jason Brown, Federal Reserve Bank of Kansas City; Elior Cohen, Federal Reserve Bank of Kansas City

Discussants:

- Jason Brown, Federal Reserve Bank of Kansas City
- Xiang Zhang, McGill University
- Andrew Van Leuven, Oklahoma State University

34. Machine Learning in Regional Science I: Perspectives, Methods, and Applications [Formal Paper Session]

Friday | 8:00 am-10:00 am | Symphonie 3B

Organizers: Kevin Credit, Maynooth University; Matthew Lehnert, Al Akhawayn University

Presider: Gary Cornwall, BEA

- *Mapping poverty in low- and middle- income countries using asset-based measures and geospatial big data.....*Yating Ru, Cornell University; Chris Barrett, Cornell University; Elizabeth Jane Tennant, Cornell University; Peizan Sheng, Cornell University
- *A machine learning approach to obtain functional migration regions.....*Antonio Paez, McMaster University
- *For What It's Worth: Measuring Land Value in the Era of Big Data and Machine Learning.....*Scott Wentland, BEA; Jeremy Moulton, University of North Carolina - Chapel Hill; Gary Cornwall, BEA

Discussants:

- Gary Cornwall, BEA
- Yating Ru, Cornell University
- Antonio Paez, McMaster University

35. Left Behind Places & People I [Formal Paper Session]

Friday | 8:00 am-10:00 am | Symphonie 4A

Presider: Steven Bond-Smith, University of Hawaii - Manoa

- *The more labelled, the more resilient? The role of place-branding intangibles in Italian peripheral areas.....*Fabiano Compagnucci, Gran Sasso Science Institute; Alessandra Faggian, Gran Sasso Science Institute (GSSI); Giulia Urso, Gran Sasso Science Institute
- *Seeing Social Disconnection: Using Twitter Data to Understand Left Behind Places.....*Rachael Sanderson, Newcastle University; Rachel Franklin, Newcastle University; Danny MacKinnon, Newcastle University; Joe Matthews, Newcastle University
- *Regional diagnostics and local policy prescriptions.....*Steven Bond-Smith, University of Hawaii - Manoa; Philip McCann, University of Manchester

Discussants:

- Steven Bond-Smith, University of Hawaii - Manoa
- Giulia Urso, Gran Sasso Science Institute
- Rachael Sanderson, Newcastle University

36. Amenities & Happiness [Formal Paper Session]

Friday | 8:00 am-10:00 am | Symphonie 4B

Presider: Sowon Kim, Ohio State University

- *The Value of Historic Districts in Georgia.....*Carlianne Patrick, Georgia State University
- *Amenities, urban consumption and tourism.....*Miquel-Angel Garcia-Lopez, Universitat Autònoma de Barcelona; Giacomo Rosso, University of Turin & Collegio Carlo Alberto
- *What makes a happy island?.....*Dimitris Ballas, Groningen University
- *The Impact of Remote Work on Natural Amenity Values in Regional Housing Markets.....*Khyati Malik, Ohio State University; Sowon Kim, Ohio State University; Brian Cultice, Ohio State University

Discussants:

- Sowon Kim, Ohio State University
- Carlianne Patrick, Georgia State University
- Miquel-Angel Garcia-Lopez, Universitat Autònoma de Barcelona
- Dimitris Ballas, Groningen University

37. Location and Spatial Analysis I [Special Session]

Friday | 8:00 am-10:00 am | Soprano A

Organizers: Alan Murray, University of California - Santa Barbara; Ran Wei, University of California - Riverside

Presider: Ran Wei, University of California - Riverside

- *Locational Analysis and Open-Source Spatial Optimization.....*Jiwon Baik, University of California - Santa Barbara; Alan Murray, University of California - Santa Barbara
- *Spatial Income Inequality in the United States.....*Francisco Castellanos-Sosa, University of Texas - Austin
- *Franchise distribution location modeling with a distance restriction between franchisees for the convenience store chain.....*Gunhak Lee, Seoul National University

Discussants:

- Huanfa Chen, University College London
- Carlos Baez, University of California - Santa Barbara
- B. Amelia Pludow, UC Santa Barbara

38. Spatial Coronometrics I: Amenities, Recreation & Tourism [Special Session]

Friday | 8:00 am-10:00 am | Soprano C

Organizers: Peter Nijkamp, Open University, Heerlen, The Netherlands; Karima Kourtit, Open University, The Netherlands

President: Peter Batey, University of Liverpool

- *Discussion on the tourism vulnerability under the effects of Covid-19 pandemic : Taking Taiwan and its offshore islands as an example.....*Chi-Tung Hung, Ming Chuan University; Wen-Yen Lin, Ming Chuan University
- *A Day at the Park: How COVID-19 Impacted Park Amenity Valuation.....*Hongxi Zhao, Ohio State University; H. Allen Klaiber, Ohio State University
- *Urban and Rural Saturday Night Fever: Inner- and Outercity Leisure Patterns in Corona Times.....*Jaewon Lim, University of Nevada - Las Vegas
- *Resilience, Craft Breweries, and COVID-19.....*Neil Reid, University of Toledo

39. RSAI Council Meeting (by invitation only) [Business Meeting]

Friday | 8:00 am-10:00 am | Ovation

Organizer: Andrea Caragliu, Politecnico di Milano

President: Eduardo Haddad, University of Sao Paulo

Coffee [Informal meeting]

Friday | 10:00 am-10:30 am | Soprano Foyer

40. Using Regional Science to Understand the Past [Formal Paper Session]

Friday | 10:30 am-12:30 pm | Maestro

President: Rafael González-Val, Universidad de Zaragoza

- *Legendary Bridges: Rental Housing Markets in Tokugawa Japan.....*Yu Mandai, Mitsui Bunko; Masaki Nakabayashi, The University of Tokyo
- *Regional Science Meets the Past: Space and Money Circulation in Ancient Rome.....*Eduardo Haddad, University of Sao Paulo; Inacio Araujo, University of Sao Paulo
- *War and city size: The asymmetric and short-lived effects of the Spanish Civil War.....*Rafael González-Val, Universidad de Zaragoza; Javier Silvestre, Universidad de Zaragoza
- *Local public finances in Colombia: a long-term vision, 1923 - 2020.....*Jaime Bonet, Banco de la República; Javier Perez, Banco de la Republica (The Central Bank of Colombia); Diana Ricciulli, University of British Columbia

Discussants:

- Jaime Bonet, Banco de la República
- Masaki Nakabayashi, The University of Tokyo
- Eduardo Haddad, University of Sao Paulo
- Rafael González-Val, Universidad de Zaragoza

41. Roads and Travel [Formal Paper Session]

Friday | 10:30 am-12:30 pm | Soprano B

President: Elizabeth Dobis, USDA Economic Research Service

- *A methodology for optimal road space allocation between modes.....*David Murray, Ecole Polytechnique; Catherine Morency, Ecole Polytechnique
- *Automated analysis of on-street parking.....*Jean-Simon Bourdeau, Polytechnique Montréal; Catherine Morency, Ecole Polytechnique
- *Difficult Terrain and Access to Urban Areas.....*Elizabeth Dobis, USDA Economic Research Service; John Cromartie, USDA Economic Research Service; Ryan Williams, USDA Economic Research Service; Kyle Reed, USDA Economic Research Service

Discussants:

- Elizabeth Dobis, USDA Economic Research Service
- David Murray, Ecole Polytechnique
- Jean-Simon Bourdeau, Polytechnique Montréal

42. Methods in Regional Science II [Formal Paper Session]

Friday | 10:30 am-12:30 pm | Symphonie 2A

President: Junya Fukumoto, Tohoku University

- *CGE Study of Hawaiian Minimum Wage Hike: Focus on Data Development.....*Patrick Buckley, Western Washington University
- *Input-Output Model Aggregation Bias in the Context of Detailed Data Imputation.....*Randall Jackson, West Virginia University; Caroline Welter, West Virginia University; Gary Cornwall, BEA
- *Equilibrium evacuation model with the facility capacity constrains.....*Junya Fukumoto, Tohoku University

Discussants:

- Junya Fukumoto, Tohoku University
- Patrick Buckley, Western Washington University
- Caroline Welter, West Virginia University

43. Regional/Rural Development V - Childcare & Household Decision Making [Formal Paper Session]

Friday | 10:30 am-12:30 pm | Symphonie 3A

Organizers: Sarah Low, University of Illinois at Urbana-Champaign; Stephan Weiler, Colorado State University

Presider: Andrew Van Leuven, Oklahoma State University

- *A Competition Conundrum: Are Charter Schools More Exposed to Economic Shocks?.....*Michael Trouw, Colorado State University
- *Access to Childcare and Labor Productivity: Is There a Rural Affect?.....*Steven Deller, University of Wisconsin - Madison; Tessa Conroy, University of Wisconsin - Madison; Jie WU, University of Wisconsin - Madison
- *The Economic Dynamism of Child Care Establishments in the United States.....*Andrew Van Leuven, Oklahoma State University; Tessa Conroy, University of Wisconsin - Madison
- *Household Welfare Effects of ROSCAs in Rural and Urban India.....*Pushkar Maitra, Monash University; Ray Miller, Colorado State University; Ashish Sedai, University of Texas - Arlington

Discussants:

- Andrew Van Leuven, Oklahoma State University
- Steven Deller, University of Wisconsin - Madison
- Ray Miller, Colorado State University
- Michael Trouw, Colorado State University

44. Left Behind Places & People II [Formal Paper Session]

Friday | 10:30 am-12:30 pm | Symphonie 4A

Presider: Michael Lahr, Rutgers University

- *How can innovation network structure empower regional resilience?.....*Yijia Wen, florida state university; Kerry Fang, Florida state university
- *The impact of fair trade in Social and Solidarity Economy Organizations in Ecuador.....*Carolina Guevara Rosero, Escuela Politécnica Nacional; Marcela Guachamín, Escuela Politécnica Nacional; Katherine Monge, Escuela Politécnica Nacional; Henry Yanez, Escuela Politécnica Nacional; Javier Flor, Instituto de Economía Popular y Solidaria
- *NRRP-induced Occupation/Skill Shifts for Romania's NUTS-2 Regions.....*Michael Lahr, Rutgers University; Alexandru Voicu, CUNY - Staten Island

Discussants:

- Michael Lahr, Rutgers University
- Yijia Wen, florida state university
- Carolina Guevara Rosero, Escuela Politécnica Nacional

45. Changing Travel Patterns [Formal Paper Session]

Friday | 10:30 am-12:30 pm | Symphonie 4B

Presider: Kara Kockelman, University of Texas - Austin

- *Spatiotemporal analysis of public microtransit trip characteristics in North Carolina.....*Subid Ghimire, North Carolina State University; Eleni Bardaka, North Carolina State University
- *Analysis of Household-Firm Spatial Interactions in the Post-Great Recession Labor Market: Determinants of Commuting Patterns Across the Upper Midwest.....*Matthew Kures, University of Wisconsin - Madison
- *Self-Driving Vehicles' Impacts on Americans' Long-Distance Domestic Travel Choices.....*Fatemeh Fakhroosavi, University of Texas - Austin; Priyanka Paithankar, University of Texas - Austin; Kara Kockelman, University of Texas - Austin; Yantao Huang, University of Texas - Austin; Jason Hawkins, University of Nebraska - Lincoln
- *International Travel To And From The U.S.: Destination and Mode Decisions, Departure Dates, and Airline Fares.....*Priyanka Paithankar, University of Texas - Austin; Fatemeh Fakhroosavi, University of Texas - Austin; Kara Kockelman, University of Texas - Austin; Kenneth Perrine, University of Texas - Austin

Discussants:

- Kara Kockelman, University of Texas - Austin
- Kara Kockelman, University of Texas - Austin
- Subid Ghimire, North Carolina State University
- Matthew Kures, University of Wisconsin - Madison

46. Location and Spatial Analysis II [Special Session]

Friday | 10:30 am-12:30 pm | Soprano A

Organizers: Alan Murray, University of California - Santa Barbara; Ran Wei, University of California - Riverside

Presider: Alan Murray, University of California - Santa Barbara

- *The alternatives to formulating classic location problems, part 2: the p-median problem.....*Rick Church, University of California - Santa Barbara
- *Ecarbonizing Regional Multi-Modal Transportation System With Shared Electric Charging Hub.....*Zuzhao Ye, University of California - Riverside; Ran Wei, University of California - Riverside
- *Assessing Computational Performance in Land Allocation Problems with Contiguity Requirements.....*Vanessa Echeverri Figueroa, University of California - Santa Barbara; Alan Murray, University of California - Santa Barbara; Rick Church, University of California - Santa Barbara
- *An efficient solution approach for the p-dispersion problem using spatially informed properties.....*Changwha Oh, University of Tennessee; Hyun Kim, University of Tennessee; Yongwan Chun, University of Texas - Dallas

Discussants:

- Ran Wei, University of California - Riverside

- Fedor Iskhakov, Australian National University
- Ran Wei, University of California - Riverside
- Jiwon Baik, University of California - Santa Barbara

47. Spatial Corometrics II: Labor Market Dynamics [Special Session]

Friday | 10:30 am-12:30 pm | Soprano C

Organizers: Peter Nijkamp, Open University, Heerlen, The Netherlands; Karima Kourtit, Open University, The Netherlands

Presider: Neil Reid, University of Toledo

- *Labour Market Dynamics' Resilience to the COVID Crisis: A Quebec Regional Analysis.....*Nicolas Devaux, Université du Québec à Rimouski; Jean Dube, Université Laval; Cédric Brunelle, INRS-UCS
- *A dose-response assessment of the labour demand during the pandemic in Italy.....*Fernanda Gutierrez Amaras, Gran Sasso Science Institute; Alessandra Faggian, Gran Sasso Science Institute (GSSI); Andrea Ascani, Gran Sasso Science Institute (GSSI); Alexandra Tsvetkova, OECD; Wessel Vermeulen, OECD
- *Regional Economic Impact of the COVID-19 Recession.....*Louis Amato, UNC Charlotte; Richard Cebula, George Mason University; John Connaughton, UNC Charlotte

48. Perspectives on Geocomputation Approaches for Urban and Regional Systems II [Special Session]

Friday | 10:30 am-12:30 pm | Symphonie 1

Presider: Yonghua Huang, East China Normal University

- *GeoSimulation approach for modeling global urban land use change.....*Bright Addae, Simon Fraser University; Suzana Dragicevic, Simon Fraser University
- *Assessing the Impacts of Urban Wetlands Land Cover Changes on Water Provision Ecosystem Services – A geosimulation approach.....*Yenny Cuellar Roncancio, Montreal University; Liliana Perez, Montreal University
- *Evacuation Simulation on Dormitories of Chinese Universities with Considering Retardation Time.....*Yonghua Huang, East China Normal University; Hao Chu, East China Normal University; Raja Sengupta, McGill University

Discussants:

- Yonghua Huang, East China Normal University
- Bright Addae, Simon Fraser University
- Yenny Cuellar Roncancio, Montreal University

49. Graduate Student-Authored Paper Competition - Finalists

Friday | 10:30 am-12:30 pm | Symphonie 3B

President: Christa Court, University of Florida

- *Spatio-temporal localisation pattern of technological startups – RNN in predicting intra-urban startups' clusters.....*Maria Kubara, University of Warsaw
- *A Tale of Spatial Cities: How do Roads Affect the Size of Urbanized Areas?.....*Yixuan Wang, Ohio State University
- *Discrimination in Restaurant Patronage at the Onset of the Covid Pandemic.....*Guanting Yi, Ohio State University

SRSA Business Meeting (invitation only) [Business Meeting]

Friday | 12:30 pm-2:00 pm | Ovation

50. Institutions & Public Policy [Formal Paper Session]

Friday | 1:30 pm-3:30 pm | Maestro

President: Kerry Fang, Florida state university

- *Bureaucratic Influence on Policy: Evidence from Unemployment Insurance.....*Steven Craig, University of Houston; Edward Hoang, University of Colorado - Colorado Springs; Janet Kohlhase, University of Houston
- *The engine of persistency: Quantifying regional variation in the quasi-periodicity of institutional change in Europe.....*Nadiia Matsiuk, University of Padova
- *Policy (De)centralization and the Spatial Interaction Model: Theory and Illustrative Examples.....*Guido Candela, University of Bologna; Maurizio Mussoni, University of Bologna; Roberto Patuelli, University of Bologna
- *Communication Network and Power Dynamics in Economic Development Projects.....*Kerry Fang, Florida state university; Samuel Staley, Florida State University; Gordon Erlebacher, Florida State University; Yijia Wen, florida state university; Joey Zhang, Florida State University

Discussants:

- Kerry Fang, Florida state university
- Janet Kohlhase, University of Houston
- Nadiia Matsiuk, University of Padova
- Roberto Patuelli, University of Bologna

**51. Spatial Coronometrics III: Flows of People and Money and Mobility [Formal Paper Session]
Friday | 1:30 pm-3:30 pm | Soprano C**

Organizers: Peter Nijkamp, Open University, Heerlen, The Netherlands; Karima Kourtit, Open University, The Netherlands

President: Jaewon Lim, University of Nevada - Las Vegas

- *How do post-COVID migration trends stack up? A comparison of Census-based results with new address change data.....*Kevin Kane, Southern California Association of Governments
- *An Estimation of Origin-Destination Remittance Flow Matrix from US to Mexico.....*Miguel Flores, Tecnologico de Monterrey
- *Regional Science, Peace Science, and COVID-19.....*Manas Chatterji, Binghamton University

**52. Regional/Rural Development VI - Housing [Formal Paper Session]
Friday | 1:30 pm-3:30 pm | Symphonie 3A**

Organizers: Sarah Low, University of Illinois at Urbana-Champaign; Stephan Weiler, Colorado State University

President: Ayoung Kim, Mississippi State University

- *Nowhere to Sleep at the Bottom: The Plight of Housing Affordability for the Lowest Earners in the U.S.....*Thomas J. PlaHovinsak II, Longwood University; Andrew G Mueller, University of Denver; Lauren Terschan, Federal Reserve Bank of Atlanta
- *Explaining Heirs' Property in the U.S. with Spatial Models: A Spatial Perspective.....*Ayoung Kim, Mississippi State University; John Green, Southern Rural Development Center, Mississippi State University; Cassandra Johnson Gaither, USDA Forest Service, Southern Research Station; G. Rebecca Dobbs, USDA Forest Service, Southern Research Station
- *Spatial Coordination of Home Buyouts in Disaster-Prone Areas: Experimental Evidence on Policy Mechanisms and their Tradeoffs.....*Laura Paul, USDA Economic Research Service; Christina McGranaghan, University of Delaware; AR Siders, University of Delaware; Polina Dineva, University of Delaware; Leah Palm-Forster, University of Delaware; Kent Messer, University of Delaware

Discussants:

- Ayoung Kim, Mississippi State University
- Laura Paul, USDA Economic Research Service
- Andrew G Mueller, University of Denver

53. Cities, Land Use & Zoning [Formal Paper Session]

Friday | 1:30 pm-3:30 pm | Symphonie 4A

Presider: Diana Mok, University of Western Ontario

- *How does upzoning impact land use and transport: a case study of Seattle.....*Naifu Fan, Tongji University; Kara Kockelman, University of Texas - Austin; Peter Caballero, puget sound regional council; Jason Hawkins, University of Nebraska - Lincoln; Xiaohong Chen, Tongji University
- *Are all Transport Investments Equal? The Impact of Infrastructure on Urban Sprawl in Vienna, Austria.....*Hongxi Zhao, Ohio State University; H. Allen Klaiber, Ohio State University; Ulrich Morawetz, University of Natural Resources and Life Sciences; Douglas Wrenn, Pennsylvania State University
- *A global perspective on land use regulations and informal settlements.....*Eric Heikkila, University of Southern California; Cynthia Goytia, UTDT
- *Are riskier cities more compact? An empirical study of the 11 largest Census Metropolitan Areas in Canada, 2016.....*Diana Mok, University of Western Ontario; Jinfei Wang, University of Western Ontario; Xiaoxuan Sun, University of Western Ontario

Discussants:

- Diana Mok, University of Western Ontario
- Kara Kockelman, University of Texas - Austin
- Hongxi Zhao, Ohio State University
- Eric Heikkila, University of Southern California

54. Poverty & Welfare [Formal Paper Session]

Friday | 1:30 pm-3:30 pm | Symphonie 4B

Presider: Yating Ru, Cornell University

- *Spatial clusters of single-mother households and regional characteristics in Japan.....*Yuki Shibatsuji, Keio University
- *How Urbanization Affects Child Nutritional Outcomes in African Countries – Empirical Evidence from Egypt, Ghana, Nigeria, and Senegal.....*Yating Ru, Cornell University

Discussants:

- Yating Ru, Cornell University
- Yuki Shibatsuji, Keio University

55. Location and Spatial Analysis III [Special Session]

Friday | 1:30 pm-3:30 pm | Soprano A

Organizers: Alan Murray, University of California - Santa Barbara; Ran Wei, University of California - Riverside

President: Rick Church, University of California - Santa Barbara

- *Evaluation of a forest treatment planning heuristic for multiple objective problems.....*B. Amelia Pludow, UC Santa Barbara; Alan Murray, University of California - Santa Barbara; Rick Church, University of California - Santa Barbara; Vanessa Echeverri Figueroa, University of California - Santa Barbara
- *Immigration and Income Inequality in the United States.....*Francisco Castellanos-Sosa, University of Texas - Austin
- *Distance-based Measurements and Tests of Global Spatiotemporal Association.....*Carlos Baez, University of California - Santa Barbara
- *Mapping production activity in Yukon: An investigation of geo-spatial Gross domestic product.....*Ryan Macdonald, Statistics Canada; Robby Bemrose, Statistics Canada; Mark Brown, Statistics Canada

Discussants:

- Gunhak Lee, Seoul National University
- Rick Church, University of California - Santa Barbara
- Francisco Castellanos-Sosa, University of Texas - Austin
- Rick Church, University of California - Santa Barbara

56. Perspectives on Geocomputation Approaches for Urban and Regional Systems III [Special Session]

Friday | 1:30 pm-3:30 pm | Symphonie 1

President: Changho Lee, University of Texas - Dallas

- *Fire Disaster Evacuation Simulation in Chinese Urban Subway Station.....*Hao Chu, East China Normal University
- *Impacts of spatial imputation on $p > 3$ median location-allocation problem solutions.....*Dongeun Kim, University of Texas - Dallas; Yongwan Chun, University of Texas - Dallas; Daniel Griffith, University of Texas - Dallas
- *Spatial Autocorrelation informed approaches to solving location-allocation problems: spatial autocorrelation-informed sampling for initial heuristic solutions.....*Changho Lee, University of Texas - Dallas; Daniel Griffith, University of Texas - Dallas; Hyun Kim, University of Tennessee; Yongwan Chun, University of Texas - Dallas

Discussants:

- Changho Lee, University of Texas - Dallas
- Hao Chu, East China Normal University
- Dongeun Kim, University of Texas - Dallas

57. Graduate Student-Led Paper Competition - Finalists [Special Session]

Friday | 1:30 pm-3:30 pm | Symphonie 3B

Presider: Christa Court, University of Florida

- *Climate Variability and County-Level Net Migration Rate in the United States, 1970 – 2010.....*Shuai Zhou, Pennsylvania State University; Guangqing Chi, Pennsylvania State University; Brian Thiede, Pennsylvania State University
- *Impact of Demolitions on Neighboring Property Values in Detroit.....*Camila Alwayay Torrejon, Michigan State University; Dusan Paredes, Universidad Catolica del Norte; Mark Skidmore, Michigan State University
- *The Impact of Wildfires on Regional Demographic Changes: Evidence from Oregon.....*Sowon Kim, Ohio State University; Yixuan Wang, Ohio State University; Seung-Hun Chung, Ohio State University
- *Investigating the Factors of Household Purchase Intention of Autonomous Vehicles in California, United States.....*Md. Mokhlesur Rahman, University of North Carolina - Charlotte; Jean-Claude Thill, University of North Carolina - Charlotte

58. Diversity Initiatives in Regional Science [Panel]

Friday | 1:30 pm-3:30 pm | Soprano B

Organizer: Yuri Mansury, Illinois Institute of Technology

Presider: Yuri Mansury, Illinois Institute of Technology

Panelists:

- Andrea Caragliu, Politecnico di Milano
- Tessa Conroy, University of Wisconsin - Madison
- Kieran Donaghy, Cornell University
- Bruce Newbold, McMaster University
- Amanda Weinstein, University of Akron
- John Sporing, NARSC

59. Neighborhoods & Neighborhood Change

Friday | 1:30 pm-3:30 pm | Symphonie 2A

Presider: Shriya Rangarajan, Cornell University

- *Spatiotemporal Patterns of Neighborhood Change: A Text Classification and Regionalization Approach.....*Isabelle Nilsson, University of North Carolina - Charlotte; Elizabeth Delmelle, University of North Carolina - Charlotte
- *National Homebuilders' Internal Network and Local Housing Outcomes.....*seohee kim, Duke University
- *Urbanization Patterns and Social Capital Networks among regions for Natural Disaster Resilience.....*Kiyomi Kawamoto, Toyo University; Eric Yamashita, University of Hawaii - Manoa
- *Spatial Patterns of Demolition Activity and Regional Deconstruction Potential: Using spatial analysis to inform policy-making in Ithaca, New York.....*Shriya Rangarajan, Cornell University; Jennifer Minner, Cornell University; Yu Wang, Cornell University; Felix Heisel, Cornell University

Discussants:

- Shriya Rangarajan, Cornell University
- Isabelle Nilsson, University of North Carolina - Charlotte
- seohee kim, Duke University
- Kiyomi Kawamoto, Toyo University

Coffee [Informal meeting]

Friday | 3:30 pm-4:00 pm | Soprano Foyer

60. Spatial Corometrics IV: Institutions, Neighborhoods & Resilience [Special Session]

Friday | 4:00 pm-5:30 pm | Soprano C

Organizers: Peter Nijkamp, Open University, Heerlen, The Netherlands; Karima Kourtit, Open University, The Netherlands

President: Peter Nijkamp, Open University, Heerlen, The Netherlands

- *Institutional quality and COVID-19 vaccination: national factors and subnational authority.....*Chiara F. Del Bo, Università degli Studi di Milano
- *Neighborhood Effects on Covid-19 Vaccinations.....*Charlotta Mellander, Jonkoping International Business School
- *Rural and urban fertility impacts of COVID-19 stay at home orders.....*Michael Betz, Ohio State University

61. Education: Outcomes & Impacts [Formal Paper Session]

Friday | 4:00 pm-6:00 pm | Maestro

President: Jeff Chan, Wilfrid Laurier University

- *Local effects of education and age cohorts on unemployment in Germany.....*Carsten Ochsén, University of Applied Labour Studies
- *Does access to public parks influence educational outcomes for elementary school students?.....*Lea Fortmann, University of Puget Sound; Isha Rajbhandari, University of Puget Sound
- *Is Education Finance Driven by Tastes for Equality, or Tastes for Education?.....*Chris Biolsi, Western Kentucky; Steven Craig, University of Houston; Amrita Dhar, University of Mary Washington
- *The Long-Run Effects of Childhood Exposure to Market Access Shocks: Evidence from the U.S. Railroad Network Expansion.....*Jeff Chan, Wilfrid Laurier University

Discussants:

- Jeff Chan, Wilfrid Laurier University
- Carsten Ochsén, University of Applied Labour Studies
- Isha Rajbhandari, University of Puget Sound
- Steven Craig, University of Houston

62. Housing III: Rents, Taxes, & Property Values [Formal Paper Session]

Friday | 4:00 pm-6:00 pm | Symphonie 1

Presider: Timothy Hodge, Oakland University

- *Tenant Rights, Eviction, and Rent Affordability.....*Edward Coulson, University of California - Irvine; Thao Le, Georgia State University; Lily Shen, Clemson University
- *Tax Revolt and Neighborhood Churning: A California Style.....*Soomi Lee, University of La Verne
- *A Double Negative: Capitalizing on Assessment Regressivity.....*Timothy Hodge, Oakland University; Timothy Komarek, Old Dominion University; Andrew McAllister, Oakland University
- *Housing prices and strikes: Evidence from Cali, Colombia.....*Jhon James Mora, Universidad Icesi; Juan Sayago, Universidad Icesi

Discussants:

- Juan Sayago, Universidad Icesi
- Edward Coulson, University of California - Irvine
- Soomi Lee, University of La Verne
- Timothy Hodge, Oakland University

63. Migration: Patterns and Impacts [Formal Paper Session]

Friday | 4:00 pm-6:00 pm | Symphonie 2A

Presider: Yu Wang, Cornell University

- *The spatial spillovers of migration on education: Evidence from the Philippines.....*Christopher J. Cabuay, De La Salle University; Budy P. Resosudarmo, Australian National University
- *Social and geographic mobility in the Northern California megaregion: an analysis of sequential moves.....*Andre Comandon, University of Southern California; Seva Rodnyansky, Occidental College; Marlon Boarnet, University of Southern California
- *Welcome back! The impact of 'return initiatives' on interregional return migration to rural regions.....*Anja Rossen, Institute for Employment Research (IAB); Moritz Meister, Institute for Employment Research (IAB); Cornelius Peters, Institute of Rural Economics
- *TRACKING THE PEACOCKS: A SPATIAL ANALYSIS OF INTERPROVINCIAL MIGRATION IN CHINA, 1990-2020.....*Yu Wang, Cornell University; Sainan Lin, Wuhan University; John Carruthers, Cornell University

Discussants:

- Yu Wang, Cornell University
- Budy P. Resosudarmo, Australian National University
- Andre Comandon, University of Southern California
- Anja Rossen, Institute for Employment Research (IAB)

64. Regional/Rural Development VII - Entrepreneurship & Rural Economic Development

[Formal Paper Session]

Friday | 4:00 pm-6:00 pm | Symphonie 3A

Organizers: Sarah Low, University of Illinois at Urbana-Champaign; Stephan Weiler, Colorado State University

Presider: Nicholas Kacher, Scripps College

- *Impacts of Broadband Availability and Speed on Employment at the Business Establishment Level: An Investigation Using Validated National Establishment Time Series (NETS) and Data Axle Data.....*Christina Biedny, Oklahoma State University; John Pender, USDA Economic Research Service; Brian Whitacre, Oklahoma State University
- *Housing Debt and New Business Formation.....*Nicholas Kacher, Scripps College
- *New Technologies, Innovation and Rural-Urban Linkages.....*Philip McCann, University of Manchester; Raquel Ortega-Argilés, University of Manchester; Enrique Garcilazo, OECD; Michelle Marshallian, OECD

Discussants:

- Nicholas Kacher, Scripps College
- Philip McCann, University of Manchester
- Craig Carpenter, Michigan State University

65. Economic Impact of Openings & Closures [Formal Paper Session]

Friday | 4:00 pm-6:00 pm | Symphonie 4A

Presider: Mark Partridge, Ohio State University

- *Emergency Department Closures and Mortality.....*Pinka Chatterji, University at Albany, SUNY; Chunyu Ho, University at Albany, SUNY; Xue Wu, University at Albany, SUNY
- *Military Installations as Economic Anchors: An Enhanced Examination of Regional Impacts.....*Joshua Drucker, University of Illinois at Chicago; Marc Doussard, University of Illinois Urbana Champaign
- *Causal Inference of the Impact of Abolition of Railways on Local Population Along Lines.....*Junya Fukumoto, Tohoku University; Shuhei Kasuo, Sojitz Corporation
- *Identifying Agglomeration Spillovers: New Evidence from Large Plant Openings.....*Carlianne Patrick, Georgia State University; Mark Partridge, Ohio State University

Discussants:

- Mark Partridge, Ohio State University
- Xue Wu, University at Albany, SUNY
- Joshua Drucker, University of Illinois at Chicago
- Junya Fukumoto, Tohoku University

66. Regional Economic Effects of Disasters [Special Session]

Friday | 4:00 pm-6:00 pm | Soprano A

Organizers: Yasuhide Okuyama, University of Kitakyushu; Adam Rose, University of Southern California

President: Adam Rose, University of Southern California

- *Impact of Floods & Wildfires on Household Finance.....*Amy Ando, University of Illinois - Urbana-Champaign; Paavani Sachdeva, University of Illinois - Urbana-Champaign; Yilan Xu, University of Illinois - Urbana-Champaign
- *Behavioral Economic Consequences of Disasters.....*Adam Rose, University of Southern California
- *Fiscal policy response of local governments to floods in Italy.....*Chiara Lodi, University of Urbino; Giovanni Marin, University of Urbino; Marco Modica, Gran Sasso Science Institute
- *Application of Urban Landuse Survey on Hazard Vulnerability Assessment – A Case Study of Xibei Area, New Taipei City, Taiwan.....*WEN-YEN LIN, MING CHUAN UNIVERSITY; CHI-TUNG HUNG, MING CHUAN UNIVERSITY

Discussants:

- Adam Rose, University of Southern California
- Marco Modica, Gran Sasso Science Institute
- Huan LIU, Kyoto University
- Paavani Sachdeva, University of Illinois - Urbana-Champaign

67. "Assessing a Waterfront Climate Resilience Plan: Findings from the NERSA/NARSC summer School" [Special Session]

Friday | 4:00 pm-6:00 pm | Soprano B

Organizer: Kieran Donaghy, Cornell University

President: Kieran Donaghy, Cornell University

- *Economic Impact Analysis of the NYC Financial District (FiDi) Plan Implementation in Lower Manhattan: An Input-Output Approach.....*Caroline Welter, West Virginia University; Daniel Centuriao, West Virginia University
- *Who Cares? An Analytical Hierarchy Process to Understand Stakeholder Priorities in Climate Resilience Plans.....*Shriya Rangarajan, Cornell University; Marina Manganaris, George Mason University; Yaxuan Wen, Brandeis University; Daniel Centuriao, West Virginia University
- *How do We Value Access to Water vs. Flooding Risk? A Difference-in-Difference Spatial Hedonic Model Approach.....*Yaxuan Wen, Brandeis University; Shriya Rangarajan, Cornell University; Marina Manganaris, George Mason University; Daniel Centuriao, West Virginia University

Discussants:

- Kieran Donaghy, Cornell University
- Yuri Mansury, Illinois Institute of Technology
- Caroline Welter, West Virginia University

68. NARSC Diversity & Inclusion Committee Annual Lecture [Special Session]

Friday | 4:00 pm-6:00 pm | Symphonie 3B

- *The Impacts of COVID-19 on Food Access.....*Daoqin Tong, Arizona State University

69. Machine Learning in Regional Science II: Perspectives, Methods, and Applications [Special Session]

Friday | 4:00 pm-6:00 pm | Symphonie 4B

Organizers: Kevin Credit, Maynooth University; Matthew Lehnert, AI Akhawayn University

President: Emre Tepe, University of Florida

- *A structured comparison of causal machine learning methods to assess heterogeneous treatment effects in spatial data.....*Kevin Credit, Maynooth University; Matthew Lehnert, AI Akhawayn University
- *Evaluating Impacts of Existing Approaches Applied to Account for Spatial Dependencies in Machine Learning Methods on Prediction Accuracy.....*Emre Tepe, University of Florida
- *What Drives Urban Redevelopment Activities? Evidence from Machine-Learning in Three US Cities Based on Unbalanced Data.....*John Carruthers, Cornell University; Hanxue Wei, Cornell University

Discussants:

- Hanxue Wei, Cornell University
- Kevin Credit, Maynooth University
- Emre Tepe, University of Florida

70. Publishing in Regional Science: Emerging Scholars Committee Panel Discussion [Panel]

Friday | 4:00 pm-6:00 pm | Symphonie 7

Organizers: Amanda Weinstein, University of Akron; Kevin Credit, Maynooth University; Elizabeth Mack, Michigan State University

President: Amanda Weinstein, University of Akron

Panelists:

- Alessandra Faggian, Gran Sasso Science Institute (GSSI)
- Alan Murray, University of California - Santa Barbara
- Rosella Nicolini, Universitat Autònoma de Barcelona

71. Great Minds in Regional Science [Special Session]

Friday | 5:30 pm-6:15 pm | Soprano C

Organizers: Karima Kourtit, Open University, The Netherlands; Peter Nijkamp, Open University, Heerlen, The Netherlands

President: Peter Batey, University of Liverpool

- *Great Minds in Regional Science: Yorgos Papageorgiou.....Bruce Newbold, McMaster University*

SATURDAY, NOVEMBER 12

Coffee [Informal meeting]

Saturday | 7:30 am-8:30 am | Soprano Foyer

Registration & Exhibits

Saturday | 7:30 am-10:00 am | Soprano-Foyer

72. Inequality: Regional Dynamics & Socio-Economic Impacts [Formal Paper Session]

Saturday | 8:00 am-10:00 am | Symphonie 1

President: Kwasi Tabiri, Kwame Nkrumah University of Science and Technology

- *Public Debt and Regional Inequality in India: A Spatial Analytics Approach.....Sudhir Thakur, California State University Sacramento*
- *Re-examining patterns of regional income inequality in the U.S., 1970-2020.....Annie Lee, McGill University; Sébastien Breau, McGill University*
- *Measuring the Value of Rent Stabilization and Understanding its Implications for Racial Inequality: Evidence from New York City.....Ruoyu Chen, University of Windsor; Hanchen Jiang, University of North Texas; Luis Quintero, Johns Hopkins University*
- *A disaggregated analysis of socioeconomic inequalities in childhood malnutrition in Nigeria.....Jacob Novignon, Kwame Nkrumah University of Science and Technology; Chukwuedo Susan Oburota, University of Calabar; Kwasi Tabiri, Kwame Nkrumah University of Science and Technology*

Discussants:

- Kwasi Tabiri, Kwame Nkrumah University of Science and Technology
- Sudhir Thakur, California State University Sacramento
- Annie Lee, McGill University
- Ruoyu Chen, University of Windsor

**73. Regional/Rural Development VIII - Regional and Rural Finances [Formal Paper Session]
Saturday | 8:00 am-10:00 am | Symphonie 3A**

Organizers: Sarah Low, University of Illinois at Urbana-Champaign; Stephan Weiler, Colorado State University

President: Austin Landini, University of Missouri - Columbia

- *Credit Constraints on Military Spouses.....*Kristopher Deming, Michigan State University; Craig Carpenter, Michigan State University
- *CRA and the Geographic Dispersion of PPP Loans.....*Austin Landini, University of Missouri - Columbia; Kristopher Deming, Michigan State University; Stephan Weiler, Colorado State University
- *Potential Impacts of Social Security Cash Reserve Depletion and Proposed Program Reform on Next Generation Low-income Rural Recipients.....*Tracey Farrigan, U.S. Department of Agriculture; Leif Jensen, Pennsylvania State University
- *Trade, Offshoring, and Manufacturing Employment Volatility in Mexico.....*Adam Walke, Colorado State University

Discussants:

- Adam Walke, Colorado State University
- Austin Landini, University of Missouri - Columbia
- Tracey Farrigan, U.S. Department of Agriculture
- Kristopher Deming, Michigan State University

**74. Analysis of Economic Viability, Resilience and Sustainability of Transportation Logistics Systems in Post-Conflict Zones [Formal Paper Session]
Saturday | 8:00 am-10:00 am | Symphonie 3B**

Organizers: Adam Rose, University of Southern California; Kieran Donaghy, Cornell University

Presiders: Adam Rose, University of Southern California; Peter Nijkamp, Open University, Heerlen, The Netherlands;

- *Putting it Together: Assembling and Solving a Dynamic Spatial Computable General Equilibrium Model in EMP.....*Kieran Donaghy, Cornell University
- *Markets and Port Infrastructure.....*Terry Clower, George Mason University; Laurie Schintler, George Mason University; Camilla Bosanquet, George Mason University
- *Expert Elicitation to Specify Stakeholder Objectives in Transportation Infrastructure Development Nation Infrastructure Development.....*Richard John, University of Southern California; Adam Rose, University of Southern California; Denton Cohen, University of Southern California
- *Post-War Lessons and Actions on Regions in Disruption: Cascadic Prosilience Investments.....*Peter Nijkamp, Open University, Heerlen, The Netherlands; Karima Kourtit, Open University, The Netherlands

Discussants:

- Peter Nijkamp, Open University, Heerlen, The Netherlands

- Kieran Donaghy, Cornell University
- Terry Clower, George Mason University
- Adam Rose, University of Southern California

Panelists:

- Kieran Donaghy, Cornell University
- Terry Clower, George Mason University
- Laurie Schintler, George Mason University
- Camilla Bosanquet, George Mason University
- Richard John, University of Southern California
- Adam Rose, University of Southern California
- Denton Cohen, University of Southern California

**75. Food & Waste [Formal Paper Session]
Saturday | 8:00 am-10:00 am | Symphonie 4A**

Presider: Bartlomiej Rokicki, University of Warsaw

- *Refining food access metrics for more actionability.....*Shriya Rangarajan, Cornell University
- *We Love Green: Households' Valuation of Organic Farming and Challenges of Signalling.....*Marine Coinon, Toulouse School of Economics; Rachel GUILLAIN, University of Burgundy; Sophie Legras, INRA - Dijon
- *Effects of Veterinarians on Foodborne Illness and Meat Output: Evidence From the Veterinary Medicine Loan Repayment Program.....*Ben Blemings, Cornell University; Clinton Neill, Cornell University
- *Compulsory solid waste collection in Poland – spatial inequalities and their determinants.....*Bartlomiej Rokicki, University of Warsaw; Raul Silveira Neto, Federal University of Pernambuco; Magdalena Miśkowiec, Jagiellonian University

Discussants:

- Bartlomiej Rokicki, University of Warsaw
- Shriya Rangarajan, Cornell University
- Rachel GUILLAIN, University of Burgundy
- Ben Blemings, Cornell University

**76. Honoring and Celebrating Arthur Getis: A LEGEND in Spatial Analysis I [Special Session]
Saturday | 8:00 am-10:00 am | Soprano C**

Organizers: Alan Murray, University of California - Santa Barbara; Luc Anselin, University of Chicago; Sergio Rey, University of California - Riverside

President: Alan Murray, University of California - Santa Barbara

- *The contributions of Art Getis to Regional Science and Spatial Analysis.....*Luc Anselin, University of Chicago; Sergio Rey, San Diego State University; Alan Murray, University of California - Santa Barbara
- *Statistical Hot Spot Maps: A Spatial Bibliometric Festschrift in Honor of Art Getis.....*Lauren Griffin, Esri; Kevin Butler, Esri; Colleen Conner, Esri
- *Inspired by Art.....*Peter Rogerson, Arizona State University
- *Measuring Two Decades of Urban Spatial Structure: The Evolution of Agglomeration Economies in American Metros.....*Elijah Knaap, University of California - Riverside; Sergio Rey, San Diego State University
- *The Art of regional science.....*Alan Murray, University of California - Santa Barbara

Discussants:

- Alan Murray, University of California - Santa Barbara
- Peter Rogerson, Arizona State University
- Michael Tiefelsdorf, University of Texas - Dallas
- Lauren Griffin, Esri

Coffee [Informal meeting]

Saturday | 10:00 am-10:30 am | Soprano Foyer

77. Skills, Earnings, & Income [Formal Paper Session]

Saturday | 10:30 am-12:30 pm | Symphonie 2A

President: Valérie von Gleichen, University of Wuerzburg

- *Cities, Aggregate Income, and Growth in Germany.....*Katja Gehr, University of Wuerzburg; Michael Pflüger, University of Wuerzburg
- *The Changing Geography of Skills and Real Income.....*Anthony Frigon, HEC MONTREAL; Michael Storper, University of California, Los Angeles
- *Regional Changes in Minimum Wage and their Effect on the US Labor Market.....*Dawn Otterby, University of Maine; Andrew Crawley, University of Maine; Todd Gabe, University of Maine
- *The earnings premium in bigger cities - Evidence from Germany.....*Valérie von Gleichen, University of Wuerzburg

Discussants:

- Valérie von Gleichen, University of Wuerzburg
- Katja Gehr, University of Wuerzburg
- Anthony Frigon, HEC MONTREAL
- Dawn Otterby, University of Maine

78. Regional/Rural Development IX - Minority Banking and Entrepreneurship [Formal Paper Session]

Saturday | 10:30 am-12:30 pm | Symphonie 3A

Organizers: Sarah Low, University of Illinois at Urbana-Champaign; Stephan Weiler, Colorado State University

President: Tessa Conroy, University of Wisconsin - Madison

- Going Native: Adopting Local Heuristics for Rural and Regional Development Projects.....Chayce Kenny, Saint Louis University
- *Demographic Transition and Census Tract Economic Opportunity: A Study of Colorado.....*Austin Landini, University of Missouri - Columbia
- *Pushed, Pulled, and Stuck: Labor Markets and New Businesses Owned by People of Color.....*Tessa Conroy, University of Wisconsin - Madison; Austin Landini, University of Missouri - Columbia
- *"Let Us Put Our Moneys Together:" Minority-Owned Banks, Local Economic Development, and Resilience to Crises.....*Allen Berger, University of South Carolina; Maryann Feldman, Arizona State University; William Langford, University of North Carolina - Chapel Hill; Raluca Roman, Federal Reserve Bank of Philadelphia

Discussants:

- William Langford, University of North Carolina - Chapel Hill
- Chayce Kenny, Saint Louis University Tessa Conroy, University of Wisconsin - Madison
- Austin Landini, University of Missouri - Columbia

79. Disease Mitigation and Industrial Clusters [Formal Paper Session]

Saturday | 10:30 am-12:30 pm | Symphonie 4A

President: Clio Andris, Georgia Institute of Technology

- *Human-Network Regions as Geographic Units for Disease Mitigation.....*Clio Andris, Georgia Institute of Technology; Caglar Koylu, University of Iowa; Mason Porter, University of California - Los Angeles
- *Optimizing spatial interventions for coupled economic-epidemic systems in an urban megaregion.....*Gong Zhaoya, Peking University; Lou Huiping, Peking University; Meng Yu, Ohio State University; Chen Zhenhua, Ohio State University
- *Migration, Economic Growth and Spatial Effects: Evidence from City Clusters in China.....*Zehan Pan, Fudan University; Xiaochen Zhang, Duke Kunshan University; Gang Li, Fudan University
- *Building Industry Clusters from the Ground Up: Defining and measuring industry development for precision policies and specific regions.....*Ping Zheng, Indiana University; Timothy F. Slaper, Indiana University

Discussants:

- Meng Yu, Ohio State University
- Clio Andris, Georgia Institute of Technology

- Ping Zheng, Indiana University
- Xiaochen Zhang, Duke Kunshan University

**80. Honoring and Celebrating Arthur Getis: A LEGEND in Spatial Analysis II [Special Session]
Saturday | 10:30 am-12:30 pm | Soprano C**

Organizers: Alan Murray, University of California - Santa Barbara; Sergio Rey, University of California - Riverside; Luc Anselin, University of Chicago

President: Lauren Griffin, Esri

- *A Spatio-temporal Ecological Model of COVID-19 Vaccination Disparities in Texas.....*Michael Tiefelsdorf, University of Texas - Dallas; Kyunghee Rhyu, University of Texas - Dallas
- *Identifying the poverty alleviation through space-time hot spots analysis from night-time images: A case study in Eastern Economic Corridor, Thailand.....*Dongmei Chen, Queen`s University; Sirikul Hutasavi-Tungsapdongto, Queen`s University
- *Mind the Forgotten Middle: The Bivariate Local Geary`s C.....*Ran Tao, University of South Florida; Jean-Claude Thill, University of North Carolina - Charlotte

Discussants:

- Jean-Claude Thill, University of North Carolina - Charlotte
- Tong Zhang, Purdue University
- Elijah Knapp, University of California - Riverside

**81. Papers in Regional Science Lecture [Special Session]
Saturday | 10:30 am-12:30 pm | Symphonie 3B**

President: Rosella Nicolini, Universitat Autònoma de Barcelona

- *The Impacts of More Severe Weather Events on Housing Markets.....*Amanda Ross, University of Alabama

Discussant: Edward Coulson, University of California - Irvine;

**NARSC Awards Luncheon [Business Meeting]
Saturday | 12:30 pm-2:30 pm | Soprano A/B**

**82. The Transportation System: Impact of Investments [Formal Paper Session]
Saturday | 2:45 pm-4:45 pm | Symphonie 1**

Presider: Tobie Cusson, Imperial College London

- *Can a Supply Change in Mass Transit can (re)Shape Urbanization? The Example of the Tramway in Dijon (France).....*Jean Dube, Universite Laval; Mohamed Hilal, Institut Agro Dijon; Julie Le Gallo, Institut Agro Dijon; Diego Legros, Universite de Bourgogne
- *The Impact of Public Transit on Firms' Survival: the Case of the Laval Subway.....*Marie-Pier Champagne, Laval University; Jean Dube, Universite Laval
- *The welfare effects of spatial re-organisation: broadening the theoretical foundations of appraisal.....*Tobie Cusson, Imperial College London; Daniel Hörcher, Imperial College London; Roger Vickerman, Imperial College London; Daniel Graham, Imperial College London
- *Examining the relationship between transit, gentrification, and neighborhood characteristics.....*Adam Schmidt, North Carolina State University; Eleni Bardaka, North Carolina State University

Discussants:

- Adam Schmidt, North Carolina State University
- Jean Dube, Universite Laval
- Marie-Pier Champagne, Laval University
- Tobie Cusson, Imperial College London

**83. Innovation & Entrepreneurship [Formal Paper Session]
Saturday | 2:45 pm-4:45 pm | Symphonie 2A**

Presider: Tom Kemeny, University of Toronto

- *Regional Innovation, Age Structure and Productivity: Evidence from China's Patent Data.....*Xiaochen Zhang, Duke Kunshan University; Min Zhang, Soochow University
- *SMEs Under Water. The Impact of Households' Capital Shocks on SMEs.....*Rebecca Mari, London School of Economics
- *Disruptive innovation and spatial inequality.....*Tom Kemeny, University of Toronto; Sergio Petralia, Utrecht University; Michael Storper, University of California, Los Angeles

Discussants:

- Tom Kemeny, University of Toronto
- Xiaochen Zhang, Duke Kunshan University
- Rebecca Mari, London School of Economics

**84. Alternative Vehicles: Perceptions, Impacts & Production [Formal Paper Session]
Saturday | 2:45 pm-4:45 pm | Symphonie 3B**

Presider: Thomas Klier, Federal Reserve Bank of Chicago

- *Technological Change for Precarious Work: Perception of Autonomous Vehicles from Transportation Platform Drivers.....*Sicheng Wang, Michigan State University; Elizabeth Mack, Michigan State University
- *Estimating Macroeconomic Impacts of NEVI.....*Yue Ke, Argonne National Laboratory; Marianne Mintz, Argonne National Laboratory; Yan Zhou, Argonne National Laboratory
- *North America's Rapidly Growing EV Market: Implications for the Geography of Vehicle Production.....*Thomas Klier, Federal Reserve Bank of Chicago; Jim Rubenstein, Miami University

Discussants:

- Sicheng Wang, Michigan State University
- Yue Ke, Argonne National Laboratory
- Thomas Klier, Federal Reserve Bank of Chicago

**85. Social Media in Region Science Panel Discussion [Panel]
Saturday | 2:45 pm-4:45 pm | Symphonie 4A**

Organizers: Amanda Weinstein, University of Akron; John Winters, Iowa State University; John Sporing, NARSC

Presider: John Sporing, NARSC

Panelists:

- Steven Deller, University of Wisconsin – Madison
- Juan Sayago, Universidad Icesi
- Amanda Weinstein, University of Akron

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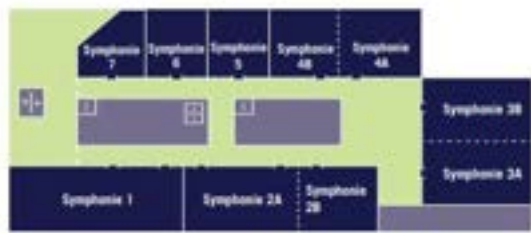
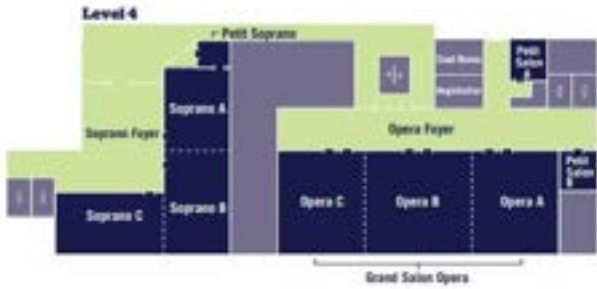
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Hotel Floor Plan

Floor Map Key

-  Elevators
-  Meeting/Conference Rooms
-  Amenities/Service Areas
-  Foyer Space/Public Areas





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