

Sept.4 Lighting 1

- 10:30 Local dominance unveils clusters in networks
- 10:33 Adaptive Cut reveals multiscale complexity in networks
- 10:36 Optimal transport problem in complex systems
- 10:39 Inferring contact network degree distribution from epidemic data via the edge-based compartmental model
- 10:42 Milgram's experiment in the knowledge space: Individual navigation strategies
- 10:45 Interdependence of Emissions: Analysing the dynamics in emissions using a simple linear model
- 10:48 Understanding the Vegetable Oil Debate and Its Implications for Sustainability through Social Media

Auditorium

- Shi, Dingyi; Shang, Fan; Chen, Bingsheng; Expert, Paul; Lü, Linyuan; Stanley, H. Eugene; Lambiotte, Renaud; Evans, Tim; Li, Ruiqi**
- Boucherie, Louis*; Lehmann, Sune*
- Mazzilli, Dario*; Patelli, Aurelio; Buffa, Lorenzo; Saracco, Fabio; Cimini, Giulio*
- Guzmán Morán, José Andrés*; Kiss, Istvan Z; Malizia, Federico; Cole, Diana; Choi, Boseung*
- Zhu, Manran*; János, Kertész*
- Kumar, Nishanth**
- Candellone, Elena*; Aleta, Alberto; Ferraz de Arruda, Henrique; Meijaard, Erik; Moreno, Yamir*

Chair: Ronaldo Menezes

Sept.4 Complexity in Cities 1

- 11:30 Understanding Route Diversifiability in Urban Road Networks
- 11:45 Self-organized, globally optimal, and real-world urban transportation networks -- Similarities and discrepancies
- 12:00 SP(L)ACES: Remote sensing sidewalk networks at scale
- 12:15 Optimising geospatial vector data matching algorithms for change detection with synthetic data
- 12:30 City mobility across the urban hierarchy

Auditorium

- Cornacchia, Giuliano*; Pappalardo, Luca; Nanni, Mirco; Pedreschi, Dino; González, Marta C.*
- Schlöpfer, Markus**
- Borge-Holthoefer, Javier**
- Guardiola, Paul; Raimbault, Juste*; Olteanu-Raimond, Ana-Maria; Perret, Julien*
- Musso, Andrea**

Chair: Marta Gonzalez

Sept.4 Complexity in Cities 2

- 15:30 Information Flow and Causal Redundancy in Geographic Systems: With the Case of the UK Housing Market
- 15:45 Measuring urban mobility and employment diversification across different regions
- 16:00 Mobility behavior by type of work and its implications for informality
- 16:45 Unraveling the interplay of time use, mobility, and lifestyles across urban occupations
- 17:00 Modeling gentrification as a relocation flow-based, spatio-temporal process

Auditorium

- Zhang, Jing**
- Wu, Zeyu*; González, Marta C.*
- Chavez-Jimenez, Christopher*; Rosas, Marco Antonio; Osorio, Carlos; Knoblauch, Steffen; Rocha, Antonio A; Gershenson, Carlos; González, Marta C.*
- Chen, Baoqi Eileen*; González, Marta C.*
- Mauro, Giovanni*; Pedreschi, Nicola; Lambiotte, Renaud; Pappalardo, Luca*

Chair: Massimiliano Luca

Sept.5 Lighting 2

- 10:30 On the forecastability of food insecurity
- 10:36 Higher-order correlations reveal complex memory in temporal hypergraphs
- 10:39 Distinguishing between determinism and noise in complex systems data
- 10:42 Complexity and Ethics
- 10:45 Urban poor exhibit higher smartphone usage during nighttime hours
- 10:48 Revisiting and modeling power-law distributions in empirical outage data of power systems
- 10:51 Multiplayer cooperation in networks of communities

Auditorium

- Foini, Pietro; Tizzoni, Michele; Martini, Giulia; Paolotti, Daniela; Omodei, Elisa**
- Gallo, Luca*; Lacasa, Lucas; Latora, Vito; Battiston, Federico*
- Rowland Adams, Joe**
- Alterman Blay, Enio*; Jaramillo, Ana; Adisa, Olumide; Dies, Samantha; Resende, Paulo; Di Bona, Gabriele*
- Musso, Andrea*; Alessandretti, Laura M*
- Odor, Geza*; Hartmann, Balint; Deng, Shengfeng; Kelling, Jeffrey*
- Pires, Diogo L*; Broom, Mark*

Chair: Jacopo Iacopini

Sept.5 Complexity in Cities 3

- 11:30 Assessing the real estate market spatial segmentation
- 11:45 Mobility is more sustainable in compact and 15-minute cities
- 12:00 Integrating Air Traffic into the Global Value Chain: the case of Singapore

Auditorium

- Abella, David**
- Marzolla, Francesco*; Bruno, Matteo; Monteiro Melo, Hygor Piaget; Loreto, Vittorio*
- Amico, Ambra**

12:15	Finite-size scaling of human-population distributions over fixed-size cells and relation to bifractality	<i>corral, alvaro*</i> ; <i>Garcia del Muro, Montse</i>
12:30	Land Use and Urban Accessibility: A New Approach using Fitness and Complexity Metrics	<i>Monteiro Melo, Hygor Piaget*</i> ; <i>Bruno, Matteo</i> ; <i>Loreto, Vittorio</i>
12:45	Emerging electricity usage patterns and its origins in urban travel behavior	<i>Acosta Sequeda, Juan G*</i> ; <i>Auld, Joshua</i> ; <i>Derrible, Sybil</i>

Chair: Roberto Murcio

Sept.5 Complexity in Cities 4

Auditorium

15:30	City-State Interactions in a Resource-Constrained Environment: an Agent-based Model	<i>Piras, Andrea</i> ; <i>Bertolotti, Francesco*</i>
15:45	Understanding Resource-Flow Resilience in the Face of Climate Change	<i>González, Marta C.*</i> ; <i>Salgado, Ariel</i> ; <i>He, Yiyi</i> ; <i>Radke, John</i> ; <i>Ganguly, Auroop</i>
16:00	Monocentrism and phase transition in traffic systems	<i>Amaduzzi, Alberto*</i> ; <i>Gallotti, Riccardo</i> ; <i>González, Marta C.</i> ; <i>Bazzani, Armando</i>
16:45	Evolution of urban community structures	<i>Guizzo, Andrea*</i> ; <i>Centellegher, Simone</i> ; <i>Lucchini, Lorenzo</i> ; <i>Privitera, Filippo</i> ; <i>Lepri, Bruno</i> ; <i>Girolami, Michele</i> ; <i>Pappalardo, Luca</i> ; <i>Gallotti, Riccardo</i>
17:00	Hierarchical Structure of Interregional Supply Chain: A Multilayer Network Approach	<i>Maulana, Ardian*</i> ; <i>Situngkir, Hokky</i>

Chair: Li Ruiqi

Sept.6 Lighting 3

Auditorium

10:30	Extending the moral machine experiment on large language models	<i>Takemoto, Kazuhiro*</i>
10:33	A universal framework for inclusive 15-minute cities	<i>Bruno, Matteo*</i> ; <i>Monteiro Melo, Hygor Piaget</i> ; <i>Campanelli, Bruno</i> ; <i>Loreto, Vittorio</i>
10:36	Market and price forecasting behaviour of Large Language Models compared to human subjects	<i>del rio chanona, maria*</i> ; <i>Pangallo, Marco</i> ; <i>Hombres, Cars</i> ; <i>Mishkin, Pamela</i>
10:39	A Markov Decision Model for Emotion Regulation	<i>Vitanza, Eleonora*</i> ; <i>Mocenni, Chiara</i>
10:42	Dynamic predictability and spatio-temporal contexts in human mobility	<i>Poudyal, Bibandhan</i> ; <i>Pacheco, Diogo F*</i> ; <i>Oliveira, Marcos</i> ; <i>Chen, Zexun</i> ; <i>Barbosa, Hugo</i> ; <i>Menezes, Ronaldo</i> ; <i>Ghoshal, Gourab</i>

Chair: Federico Botta

Sept.6 Multimodal Networks and Urban Accessibility

Auditorium

11:30	The role of transport systems in housing insecurity: a mobility-based analysis	<i>Iyer, Nandini*</i> ; <i>Barbosa, Hugo</i> ; <i>Menezes, Ronaldo</i>
11:45	Novel Phase Transition on Charging Networks of Electric Vehicles	<i>Tanizawa, Toshihiro*</i> ; <i>Goto, Hayato</i> ; <i>Yoshida, Hiroaki</i>
12:00	Access to Opportunities and Car Dependency in Urban Environments	<i>Campanelli, Bruno*</i> ; <i>Marzolla, Francesco</i> ; <i>Bruno, Matteo</i> ; <i>Monteiro Melo, Hygor Piaget</i> ; <i>Loreto, Vittorio</i>
12:15	Geometry of optimal multilayer transportation networks	<i>Marquis, Ulysse P*</i> ; <i>Bontorin, Sebastiano</i> ; <i>Gallotti, Riccardo</i>
12:30	Complex dynamics in multimodal networks	<i>Lebacque, Jean-Patrick*</i> ; <i>Khoshyaran, Megan</i>
12:45	Planning the Electric Vehicle Transition by Integrating Spatial Information and Social Networks	<i>Wu, Jiaman*</i> ; <i>González, Marta C.</i> ; <i>Salgado, Ariel</i>

Chair: Juste Raimbault