# CURRICULUM VITAE

#### PERSONAL DATA

### BRUNO CAMPANELLI

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#### EDUCATION

- + High School Diploma from Liceo Classico Dante Alighieri, Latina, Italy, 2003, final grade 95/100
- Laurea Triennale (Bachelor's Degree) in Physics from Sapienza Università di Roma°, academic year 2007/2008, final grade 104/110
- Laurea Specialistica (Master's Degree) in Physics from Sapienza Università di Roma°, academic year 2011/2012, final grade 110/110 cum laude (with honours)

  Thesis title: Random Field Ising Model on Social Complex Networks

  Supervisors: Prof. Vittorio Loreto, Dr. Vito D. P. Servedio

#### LANGUAGES

- Italian (mother language)
- English (advanced)
- Spanish (basic)

## COMPUTER SKILLS

- Scientific programming (agent-based modelling, data analysis and visualization) in C++ and Python
- ATFX
- Usage of major operating systems (Linux-based, Windows, macOS) and office packages

#### INVOLVEMENT IN RESEARCH PROJECTS AND RESEARCH POSITIONS

- Data-driven modelling of network-wide extension of the Tree of REactionary delays in ECAC area (TREE)

  SESAR Joint Undertaking Work Package E project
- Passenger-centric Big Data Sources for Socio-economic and Behavioural Research in ATM (BigData4ATM°)
   SESAR2020 Work Package E project
- Piattaforme Digitali per la Sostenibilità (Digital platforms for Sustainability). Sapienza University of Rome. In collaboration with Sony Computer Science Laboratories Rome. 2018 – ongoing.

- B. Campanelli, P. Fleurquin, V. M. Eguíluz, J. J. Ramasco, A. Arranz, I. Extebarria., D. Schaefer (Editor). *Modeling Reactionary Delays in the European Air Transport Network*, Proceedings of the SESAR Innovation days (2014) EUROCONTROL. ISBN 978-2-87497-077-1
- P. Fleurquin, B. Campanelli, V. M. Eguíluz, J. J. Ramasco., D. Schaefer (Editor). Trees of Reactionary Delay: Addressing the Dynamical Robustness of the US Air Transportation Network. Proceedings of the SESAR Innovation days (2014) EUROCONTROL. ISBN 978-2-87497-077-1
- B. Campanelli, J. J. Ramasco, P. Fleurquin, V. M. Eguíluz, I. Extebarria, A. Arranz. Data-driven modelling of the Tree of Reactionary Delays, Proceedings of the 6th International Conference on Research in Air Transportation
- C. Ciruelos, B. Campanelli, I. Extebarria, V. M. Eguíluz, S. Peces, J. J. Ramasco. Modelling Delay Propagation Trees for Scheduled Flights. Proceedings of the Eleventh USA/Europe Air Traffic Management Research and Development Seminar
- B. Campanelli, P. Fleurquin, V. M. Eguíluz, J. J. Ramasco, C. Ciruelos, A. Arranz, D. Schaefer (Editor). TREE Model: a Tool to Explore Delay Reduction Scenarios in the ECAC Area. Proceedings of the SESAR Innovation Days (2015) EUROCONTROL. ISSN 0770-1268
- B. Campanelli, P. Fleurquin, A. Arranz, I. Extebarria, C. Ciruelos, V. M. Eguíluz, J. J. Ramasco. Comparing the Modeling of Delay Propagation in the US and European Air Traffic Networks. Journal of Air Transport Management 56, 12–18 (2016)

#### OTHER ACTIVITIES

- B. Campanelli, M. Lenormand, P. Fleurquin, J. J. Ramasco, V. M. Egu'(luz. Movilidad y Transporte: un Viaje a Través del Espacio, de la Ciudad al Mundo. Revista Española de F\((\)(sica, 28(3), 37-41\)
- First Mediterranean School of Complex Systems (attendance), Salina (Italy),
   9-13 June 2014
- Fourth Summer School on Statistical Physics of Complex and Small Systems (attendance), Palma de Mallorca (Spain), 8-19 September 2014
- B. Campanelli, J. J. Ramasco. Backward Exploration of Delay Propagation in Air Transportation Networks. Accepted talk at the 2016 Conference on Complex Systems, Amsterdam (Netherlands), 19–22 September 2016
- Third School on Complex Systems (attendance), Amsterdam (Netherlands) 16–18 September 2016
- B. Campanelli, J. J. Ramasco. A Simulation-Based Characterization of the Impact of Delayed Intercontinental Flights. Poster presented at the SESAR Innovation Days 2016, TU Delft (Netherlands), 8-10 November 2016
- Summer School on Complex Socio-Technical Systems (attendance), IFISC, Palma de Mallorca (Spain), 4-8 September 2017
- Acted as reviewer for Journal of Air Transport Management
- Acted as reviewer for Transportation Research Part C: Emerging Technologies

#### RESEARCH INTERESTS

Transportation Systems, Human Mobility, Data Science, Opinion and Social Dynamics