

## ALLEGATO B

UNIVERSITÀ DEGLI STUDI DI MILANO

selezione pubblica per n.1 posto di Ricercatore a tempo determinato ai sensi dell'art.24,

comma 3, lettera b) della Legge 240/2010 per il settore concorsuale 13/D4 ,  
settore scientifico-disciplinare SECS-S/06

presso il Dipartimento di ECONOMIA, MANAGEMENT E METODI QUANTITATIVI,  
(avviso bando pubblicato sulla G.U. n. 53 del 05/07/2019) Codice concorso 4129

## **[DANILO LIUZZI] CURRICULUM VITAE**

INFORMAZIONI PERSONALI (NON INSERIRE INDIRIZZO PRIVATO E TELEFONO FISSO O CELLULARE)

|                 |                |
|-----------------|----------------|
| COGNOME         | LIUZZI         |
| NOME            | DANILO         |
| DATA DI NASCITA | [07, 12, 1977] |

# DANILO LIUZZI

## PERSONAL INFORMATION

*email*                      [daniilo.liuzzi@gmail.com](mailto:daniilo.liuzzi@gmail.com)  
*website*                      [http://www.researchgate.net/profile/Daniilo\\_Liuzzi](http://www.researchgate.net/profile/Daniilo_Liuzzi)

## CURRENT ACADEMIC POSITIONS:

- December 2019 - present: ***Assistant Professor***, Department of Economic, Business, Mathematical and Statistical Sciences, University of Trieste, Trieste, Italy.
- September 2016 - present: ***Adjunct Professor***, Department of Economics, Management and Quantitative Methods, University of Milan, Milan, Italy.

## ACADEMIC QUALIFICATIONS:

- October 2019 - present: National Scientific Abilitation (ASN) in Economic Policy (13/A2, Seconda Fascia, 02/10/2019).

## PAST ACADEMIC POSITIONS:

- November 2018 - November 2019: ***Post Doctoral Researcher***, Department of Economics and Business, University of Cagliari, Cagliari, Italy.
- March 2018 - June 2018: ***Junior Researcher*** at Fondazione Eni Enrico Mattei (FEEM), Milan, Italy.
- September 2016 - August 2017: ***Post Doctoral Researcher***, Department of Management, Ca' Foscari University of Venice. Project Title: Interactions in complex economic systems: innovation, contagion and crises.
- March 2014 - November 2015: ***Research Associate***, Department of Applied Mathematics and Sciences, Khalifa University, Abu Dhabi, UAE.

## EDUCATION:

- December 2015: ***PhD/Doctorate in Economics***, University of Milan, Milan, Italy. Title: Space, Uncertainty and Intergenerational Issues: Essays in Environmental Economics.
- July 2012: ***MSc in Economics and Political Science***, Major in Economic Analysis and Policy, final grade: 110/110 magna cum laude, University of Milan, Milan, Italy. Thesis: "Transitional dynamics in a spatial economic growth model with human and physical capital accumulation".
- February 2005: ***Degree in Engineering (Combined Five Year Program BSc + MSc) - Major in Electronic Engineering***, Politecnico of Milan, Italy.

## RESEARCH INTERESTS:

- Economic Dynamics and Control
- Spatial Environmental and Ecological Economics
- Operations Research and Multi-criteria Decision Making
- Complexity and Computational Economics
- Artificial Intelligence and Machine Learning for Economics

## PROJECTS IN PROGRESS:

- A Neural-Network-Based Macroeconomic Model with Endogenous Migration and Poverty Traps (with A. Bucci, D. La Torre, S. Marsiglio).
- Staring at the Abyss: A Neurocognitive Founded Agent Based Model of Collective-Risk Social Dilemma under the Threat of Environmental Disaster (with A. Vie).
- Cooperation and Mobility of Worker Intra and Extra European Countries. A Two-Stage Goal Programming Model (with A. Vie, V. Lupi).
- Pollution and Migration Patterns in a Geographical Economic Growth Model (with B. Venturi).
- Transboundary Pollution Externalities: Think Globally, Act Locally? (with D. La Torre, S. Marsiglio).
- On the Implications of Geographical Heterogeneities and Externalities on Health Outcomes (with D. La Torre, S. Marsiglio).

## PUBLICATIONS:

### Journal Papers:

- *Equilibrium selection in an environmental growth model with a S-shaped production function* (with G. Bella, P. Mattana, B. Venturi), in ***Chaos, Solitons & Fractals***.  
URL: <https://doi.org/10.1016/j.chaos.2019.109432>
- *The Optimal Population Size under Pollution and Migration Externalities: a Spatial Control Approach* (with D. La Torre, S. Marsiglio), in ***Mathematical Modelling of Natural Phenomena***.  
URL: <https://doi.org/10.1051/mmnp/2019004>
- *Financial Contagion and Economic Development: an Epidemiological Approach* (with Alberto Bucci, Davide La Torre, and Simone Marsiglio), in ***Journal of Economic Behavior and Organization***.  
URL: <https://doi.org/10.1016/j.jebo.2018.12.018>

- *Population and Geography Do Matter for Sustainable Development* (with D. La Torre, S. Marsiglio), in ***Environment and Development Economics***.  
URL: <https://doi.org/10.1017/S1355770X18000475>
- *Fast traders and slow price adjustments: an artificial market with strategic interaction and transaction costs* (with P. Pellizzari, M. Tolotti), in ***Journal of Economic Interaction and Coordination***.  
URL: <https://doi.org/10.1007/s11403-018-0233-8>
- *The long-run sustainability of the European Union countries: assessing the Europe 2020 Strategy through a fuzzy goal programming model.* (with Cinzia Colapinto, Davide La Torre and Aymeric Vie), in ***Management Decision***.  
URL: <https://doi.org/10.1108/MD-05-2018-0518>
- *A stochastic dynamic multiobjective model for sustainable decision making*, in ***Annals of Operations Research*** . (with C. Colapinto, D. La Torre and F. Ben Abdelaziz).  
URL: <https://doi.org/10.1007/s10479-018-2897-9>
- *Pollution Control under Uncertainty and Sustainability Concern* (2017), in ***Environmental and Resource Economics*** - August 2017, Volume 67, Issue 4, pp 885–903 - (with D. La Torre, S. Marsiglio).  
URL: <https://doi.org/10.1007/s10640-016-0010-x>
- *Planning Sustainable Development through a Scenario Based Stochastic Goal Programming Model* (2017), in ***Operational Research*** - October 2017, Volume 17, Issue 3, pp 789–805 - (with R. Jayaraman, C. Colapinto, D. La Torre).  
URL: <https://doi.org/10.1007/s12351-016-0239-8>
- *A Fuzzy Goal Programming Model to Analyze Energy, Environmental and Sustainability Goals of the United Arab Emirates* (2017), in ***Annals of Operations Research*** -April 2017, Volume 251, Issue 1–2, pp 255–270 - (with C. Colapinto, R. Jayaraman, T. Malik).  
URL: <https://doi.org/10.1007/s10479-015-1825-5>
- *Sustainability and Intertemporal Equity: a Multicriteria Approach* (2017), in ***Annals of Operations Research*** -April 2017, Volume 251, Issue 1–2, pp 271–284 - (with C. Colapinto, S. Marsiglio).  
URL: <https://doi.org/10.1007/s10479-015-1837-1>
- *Pollution Diffusion and Abatement Activities across Space and over Time* (2015), in ***Mathematical Social Science*** - Volume 78, November 2015, Pages 48–63 - (with D. La Torre, S. Marsiglio).  
URL: <https://doi.org/10.1016/j.mathsocsci.2015.09.001>
- *Dynamics and Optimal Control for a Spatially Structured Environmental Economic Model:* (2015) - ***Electronic Journal of Differential Equations*** , Vol. 2015 (2015), No. 277, pp. 1-15.

- (with D. La Torre, T. Malik, O. Sharomi, R. Zaki).

URL: <http://ejde.math.txstate.edu> or <http://ejde.math.unt.edu>

#### Contribution in Edited Volumes :

- *Towards the Realization of the Europe 2020 Agenda for Economic Growth in the European Union: An Empirical Analysis based on Goal Programming* (with Cinzia Colapinto, Davide La Torre and Aymeric Vie). Forthcoming in **Mathematical Modelling in Health, Social and Applied Sciences. Springer International Publishing**
- *Population and Pollution Interactions in a Spatial Economic Model* (2018) **Recent Advances in Mathematical and Statistical Methods for Scientific and Engineering Applications**, **AMMCS 2017 Proceedings, Springer International Publishing** .  
URL: [https://doi.org/10.1007/978-3-319-99719-3\\_49](https://doi.org/10.1007/978-3-319-99719-3_49)
- *Optimality of a two-tier rate structure for a Transaction Tax in an artificial market* - (2017) - (with P. Pellizzari, M. Tolotti) **Highlights in Cyber-Physical Multi-Agent Systems. The PAAMS Collection - International Workshops of PAAMS 2017**.  
URL: [https://doi.org/10.1007/978-3-319-60285-1\\_8](https://doi.org/10.1007/978-3-319-60285-1_8)
- *On Dynamic Multiple Criteria Decision Making Models: A Goal Programming Approach* (2015) - **Multiple Criteria Decision Making in Finance, Insurance and Investment - Springer International Publishing** , 2015, Pages 31-48 (with B Aouni, C. Colapinto, D. La Torre, S. Marsiglio).  
URL: <https://doi.org/10.1007/978-3-319-21158-9>

#### Conference Proceedings:

- *A Note on Stochastic Logistic Shocks and Economic Growth* (with D. La Torre, S. Marsiglio). In Proceedings of **8th International Conference on Modeling Simulation and Applied Optimization (ICMSAO)**  
URL: <https://doi.org/10.1109/ICMSAO.2019.8880319>
- *A Robust Goal Programming Model For Transfer Pricing Risk Hedging: Preliminary Results* (with D. La Torre, M. Repetto). In Proceedings of **8th International Conference on Modeling Simulation and Applied Optimization (ICMSAO)**  
URL: <https://doi.org/10.1109/ICMSAO.2019.8880365>
- *A Goal Programming Model with Satisfaction Function for Long-run Sustainability in the United Arab Emirates* - (2015 ) (with C. Colapinto, R. Jayaraman, D. La Torre). In Proceedings of **2015 IEEE International Conference on Industrial Engineering and Engineering Management (IEEM)**.  
URL: <https://doi.org/10.1109/IEEM.2015.7385646>

### INVITED TALKS:

- CES Economic Theory Seminar, Centre d'économie de la Sorbonne, Paris, France, June 9th, 2017.
- FEEM Seminar, Fondazione Enrico Mattei, Milan, Italy, February 6th, 2018.

### CONTRIBUTED TALKS:

- Workshop on “Development, Growth and Sustainability in a Wildlife Land”, University of Cagliari, 18-19 December 2019, Cagliari, Italy.
- Workshop on “Space and Growth: Theoretical and Empirical Models” - University of Pisa, 13-14 December 2019, University of Pisa, Pisa, Italy
- 2019 International Conference on Multiple Objective Programming and Goal Programming (MOPGP), 28-31 October 2019, Marrakech, Morocco.
- 43rd Association for Mathematics Applied to Social and Economic Sciences Meeting (AMASES) , University of Perugia, Perugia, Italy, September 2019
- 24th Annual Workshop on Economic Science with Heterogeneous Interacting Agents (WEHIA) 2019, City University of London, UK, June 2019
- Final Workshop on “Interactions in complex economic systems: contagion, innovation and crises.” Ca’ Foscari University of Venice, Venice, March 2nd, 2018
- 2017 International Conference on Multiple Objective Programming and Goal Programming (MOPGP), LCOMS Laboratory of Université de Lorraine, Metz, France, October 2017.
- Finance and Economic Growth in the Aftermath of the Crisis, University of Milan, Milan, Italy, September 2017
- 41st Association for Mathematics Applied to Social and Economic Sciences Meeting (AMASES) , University of Cagliari, Cagliari, Italy, September 2017
- The 4th Applied Mathematics, Modeling and Computational Science International Conference (AMMCS) , Waterloo, Ontario, Canada, August 2017
- 15th International Conference on Practical Applications of Agents and Multi-Agent Systems (PAAMS) 2017 , Polytechnic of Porto, Porto, Portugal, June 2017
- 22nd Annual Workshop on Economic Science with Heterogeneous Interacting Agents (WEHIA) 2017, Catholic University of the Sacred Heart, Milan, Italy, June 2017

- 4th Venice Klagenfurt Workshop on Modeling Simulation Optimization in Business and Economics, Alpen-Adria-Universität Klagenfurt, Klagenfurt, December 2016
- 2015 IEEE International Conference on Industrial Engineering and Engineering Management (IEEM), Institute of Manufacturing Technology, Singapore, Singapore, December 2015
- Annual Conference of the European Association of Environmental and Resource Economists (EAERE) 2015, University of Helsinki, Helsinki, Finland, June 2015.

#### TEACHING ACTIVITIES:

**All the following courses have been taught in English**

Adjunct Professor :

- 2019/20 Academic Year: ***Mathematical Methods for Finance***, Master Degree Economics and Finance, Department of Economics, Management and Quantitative Methods, University of Milan, Milan, Italy.
- 2018/19, 2019/20 Academic Years: ***Optimization***, Master Degree in Economics and Political Science, Department of Economics, Management and Quantitative Methods, University of Milan, Milan, Italy.
- 2018/19 Academic Year: ***Decision Making with Mathematical Computing and Optimization***, Master Degree in Data Science for Economics, Business and Finance, Department of Economics, Management and Quantitative Methods, University of Milan, Milan, Italy.
- 2016/17, 2017/18 Academic Years: ***Mathematics***, Ph.D Program of the Graduate School in Social, Economic and Political Sciences, University of Milan, Milan, Italy

Teaching Assistant:

- 2017/2018 Academic Year: ***Advanced Macroeconomics***, Master Degree Economics and Finance, Department of Economics, Management and Quantitative Methods, University of Milan, Milan, Italy.
- 2017/2018 Academic Year: ***Portfolio Optimization***, Master Degree Economics and Finance, Department of Economics, Management and Quantitative Methods, University of Milan, Milan, Italy.
- 2013/14, 2014/15, 2015/16, 2016/17, 2017/18 Academic Years: ***Mathematical Methods for Finance***, Master Degree Economics and Finance, Department of Economics, Management and Quantitative Methods, University of Milan, Milan, Italy.
- 2013/14, 2014/15, 2015/16, 2016/17, 2017/18 Academic Years: ***Optimization***, Master Degree in Economics and Political Science, Department of Economics, Management and Quantitative Methods, University of Milan, Milan, Italy.

- 2012/2013 Academic Year: *Theories and Techniques of Optimization*. Faculty of Computer Science, Free University of Bozen, Italy

#### SUMMER SCHOOLS AND ADDITIONAL EDUCATION:

- Spatial Environmental and Resource Economics. EAERE-ETH European Winter School. January 26–31, 2020, Monte Verità, Ascona, Switzerland
- Complex networks: theory, methods, and applications. Lake Como School of Advanced Studies - May 15-19, 2017 - Como, Italy
- Santa Fe Institute Complex Systems Summer School (CSSS) June 12-July 8, 2016 - Santa Fe, New Mexico, USA
- GROWTHCOM Project Summer School: Socio-Economic Complex Systems. September 6-12, 2015, Lipari Island, Italy
- Agent-Based Economic Modelling. First Ancona-Milano Summer School on AB Economics. Ancona, 1-5 September 2015

Milano, February 21, 2020