

Michele Aleandri

Academic Curriculum Vitae

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CURRENT POSITION

2022-now **Postdoctoral researcher** at University La Sapienza, Department of Mathematics.

PAST EXPERIENCES

2022-2022 **Postdoctoral researcher** at University of Bologna, Department of Statistical Sciences.

2019-2022 **Postdoctoral researcher** at LUISS University with professor Marco Dall'Aglio.

2018-2019 **Junior scientist** at Gran Sasso Science Institute.

EDUCATION AND TRAINING

2015-2018 **Ph.D. in Mathematics**, GSSI-Gran Sasso Science Institute, L'Aquila-Italy
Thesis title: *Inhomogeneous mean field models and applications* (advisor Paolo Dai Pra, co-advisor Ida G. Minelli).

2013–2014 **Master's degree in Mathematics LM-40**, Università la Sapienza, Rome, grade 110/110 cum laude
Thesis title: *Second order large deviation for East model* (advisor Lorenzo Bertini Malgarini).

2010–2012 **Bachelor's degree**, Università la Sapienza, Rome, grade 110/110
Thesis title: *Introduction to the studying of some semilinear equations* (advisor Lucio Boccardo).

2005–2009 **High school graduation**, Liceo scientifico Falcone-Borsellino, Zagarolo(RM), grade 100/100
I participated to the European project **MasterClass INFN**

RESEARCH ACTIVITIES

My research activity focuses on the following topics:

- Interacting particle systems and opinion dynamics;
- invariant measures of diffusion processes on metric graphs;
- cooperative games and power indices;
- martingale optimal transport.

CONFERENCES AND TALKS

- *Third Italian meeting on Probability and mathematical statistics* forthcoming 2022 - Bologna ,Italy - **invited**
- *100 years UMI - 800 years UniPD* forthcoming 2022 - Padova (Italy)
- *Workshop YEP XVII - Interacting particle systems* 2021 - Eurandom (online)
- *10th World Congress in Probability and Statistics* 2021 - Seul, Korea (online)
- *Modern Stochastics: Theory and Applications V* 2021 - Kyiv, Ukraine (online)

- *16th European Meeting on Game Theory (SING16)* 2021 - Granada, Spain (online)
- *PRIN meeting "ALGADIMAR"*, 2020 - Rome, Italy - La Sapienza (online)
- *GAMES 2020 - 6th World Congress of the Game Theory Society* 2021 - Budapest, Hungary (online).
- *Bernoulli - IMS One World Symposium* 2020 - A virtual one week symposium.
- *Second Italian Meeting on Probability and Mathematical Statistics* 2019 - Vietri sul mare, Italy - **invited**
- *40th Stochastic Processes and their Applications International Conference SPA2018* - Gothenburg, Sweden.
- *Stochastic models in ecology and evolutionary biology SMEEB2018* - Venice, Italy.

SUMMER SCHOOLS

- *Preferences, decisions and games* 2019 - Paris, France.
- *Stochastic Dynamics out of Equilibrium* 2017 - Marseille, France.

GRANTS

- 2021 European Kovalevskaya Travel Grant and Kovalevskaya Grant for attending the International Congress of Mathematicians ICM 2022 in St. Petersburg, Russia in July 2022 (changed to an online meeting) .
- 2018 Funding for the organization of the 136th European Studied Group with Industries - L'Aquila by COST Action TD1409, Mathematics for Industries(MI-NET) - Principal Investigator (jointly with A. Esposito and L.E. Hientzsch), total grant 4850 euro .

ACTIVITIES

- 2021 I participated to the 165th European Study Group with Industries - Durham University as mentor of the worinking goup on "Encouraging Safe, Green and Economically Sustainable use of our Natural Environment".
- 2018 I was one of the organisers of the 136th European Study Group with Industries, May 14-18 in L'Aquila.
- 2016 I participated to the 124th European Study Group with Industries I worked on " Mathematical and statistical analysis to support service performance forecasting in queuing systems " .

TEACHING ACTIVITIES

- 2022-now **Games and Strategies** *undergraduate course* at LUISS University. Teaching assistant for the professors Roberto Lucchetti and Marco Scarsini.
- 2021-now Adjunct professor of **Mathematics 1** - *undergraduate course* at LUISS University.
- 2021-2022 **Matematica generale** *undergraduate course* at University of Cassino. Teaching assistant for the professor Marina di Giacinto.
- 2021-2022 **Matematica finanziaria** *undergraduate course* at University of Cassino. Teaching assistant for the professor Marina di Giacinto.
- 2020-2021 **Social Network Analysis** *undergraduate course* at LUISS University. Teaching assistant for the professor Xavier Venel.
- 2020-2022 **Preliminary course Mathematics** *undergraduate course* at LUISS University.

- 2020-now **Mathematics and Financial Mathematics Tutor** *undergraduate course* at Università telematica Guglielmo Marconi.
- 2019-2021 **Mathematics** *undergraduate course* at LUISS University. Teaching assistant for the professor Marco Dall'Aglio.
- 2019-2021 **Games and Strategies** *undergraduate course* at LUISS University. Teaching assistant for the professors Roberto Cominetti and Roberto Lucchetti.
- 2018-2020 **Mathematics and Probability Tutor** *undergraduate and graduate courses* at LUISS University.
- 2019 **Probability** *undergraduate course* at LUISS University. Oline preliminary course.
- 2018 **Probability** *graduate course* at LUISS University. Teaching assistant for the professor Marco Scarsini.

LANGUAGES

Mother tongue Italian

Others English

Level B2

IT SKILLS

Use of: Windows, F90, Matlab, Mathematica, Microsoft Office, Photoshop, L^AT_EX.

LIST OF PUBLICATIONS

- M. Aleandri, M. Colangeli, D. Gabrielli. *A combinatorial representation for the invariant measure of diffusion processes on metric graphs*. ALEA Lat. Am. J. Probab. Math. Stat. 18, 2, pag 1773-1799(2021)
- M. Aleandri, I.G. Minelli. *Delay-induced periodic behavior in competitive populations*. Journal of Statistical Physics 185, 6(2021)
- M. Aleandri, M. Dall'Aglio, V. Fragnelli, S. Moretti. *Minimal winning coalitions and orders of criticality*. Annals of Operations Research. (2021)
- M. Aleandri, I. G. Minelli. *Opinion dynamics with Lotka-Volterra type interactions*. Electronic Journal of Probability (2019), Vol. 24, paper no. 122, 1-31.
- M. Aleandri. *Inhomogeneous mean field models and applications*. PhD Thesis, Gran Sasso Science Institute (2019).
- M. Aleandri, V. Di Giulio. *A model for interfaces and its mesoscopic limit*- Mathematics and Mechanics of Complex Systems, (2018) vol 6, No. 4.

Autorizzo il trattamento dei dati personali contenuti nel presente curriculum vitae ai sensi del D.Lgs. 196/2003 'Codice in materia di protezione dei dati personali'. Autorizzo la pubblicazione del presente curriculum vitae sul portale di Ateneo 'Amministrazione trasparente' in ottemperanza al D.Lgs. 33/2013 e al D.Lgs. 97/2016.

Roma, 15/04/2022

Michele Aleandri