Daniele Rinaldo

Personal Email: daniele.rinaldo@graduateinstitute.ch **Phone Number**: +41 (0) 788174811 INFORMATION

> Nationality: Italian

Languages spoken: Italian (native), English, French (fluent), German, Spanish (intermediate)

Website

Current Position Visiting scholar

Department of Economics and Centre for Existential Risk

University of Cambridge, United Kingdom

PREVIOUS POSITION Postdoctoral research fellow

December 2018 - August 2020

The Graduate Institute of International and Development Studies, Geneva

EDUCATION The Graduate Institute of International and Development Studies,

2018 Geneva: PhD in Economics, summa cum laude avec félicitations for both thesis and defense

Thesis title: Essays on Non-Gaussian Economics

Supervisors: Prof. Jean-Louis Arcand

Awards: Leonid Hurwicz Prize for the best doctoral thesis

Musik-Akademie Basel: Soloist diploma mit Auszeichnung 2014

Royal Academy of Music, London: MA in Piano Performance (with Knight Prize) 2011

2009 University of Padua: MSc in Mathematical Finance

University of Padua: BSc in Economics (Mathematical Economics path) 2006

Awards: summa cum laude for the best thesis in applied mathematics

Accademia Nazionale Santa Cecilia, Rome: Postgraduate Diploma in Piano Performance 2006

Conservatorio Nazionale "C.Pollini", Padua: Diploma in Piano Performance 2002

Awards: Summa cum laude

Research INTERESTS

Modeling and estimation of the economic impact of endemic diseases, with a focus on Sub-Saharan Africa. Current research: malaria, schistosomiasis and cholera

Applications to Development, Health and Environmental Economics of:

- Stochastic modeling and control
- Mean-field games
- Filtering techniques and inference on dynamical systems
- Inference with machine learning techniques

FUNDED PROJECTS: Principal investigator (together with Prof. Jean-Louis Arcand)

December 2018- August 2020:

Schistosomiasis, Agriculture and Migration in Africa: a joint Economic and Ecological Approach Funded by the Swiss Network of International Studies (SNIS). Funds awarded: CHF 250,000

Research associate

December 2018- August 2020:

Automated Interpretation of Political and Economic Policy Documents. Machine Learning using semantic and suntactic information

Funded by the Swiss National Fund (SNF).

Publications

- Increasing Risk: Dynamic Mean-Preserving Spreads (2020) Joint with Jean-Louis Arcand and Max-Olivier Hongler Journal of Mathematical Economics, Volume 86, Pages 69-82 https://www.sciencedirect.com/science/article/pii/S0304406818301332
- Can One Hear the Size of a Target Zone? (2020) [Latest Version] Joint with Jean-Louis Arcand, Max-Olivier Hongler and Shekhar Hari Kumar In resubmission, Journal of Economic Theory

Working Papers

- The Economic Impact of Schistosomiasis (2020) Joint with Jean-Louis Arcand, Javier Perez-Saez and Penelope Vounatsou submitted for review
- Health Capital, Economic Growth and the Burden of Disease (2020) Joint with Jean-Louis Arcand working paper, part of The World Bank Human Capital Project
- Firm Decisions under Jump-Diffusive Dynamics (2019) [Latest Version] Joint with Neha Deopa submitted for review
- Scenes from a Monopoly: Renewable Resources and Quickest Detection of Regime Shifts (2019) Joint with Neha Deopa (IHEID) IHEID working paper
- May the Force Be With You! Mean-Preserving Spreads and the Agency Problem (2018) IHEID working paper
- Noise-induced Entry and Exit Decisions driven by Non-Markovian Noise (2016) IHEID working paper

Teaching

The Graduate Institute of International and Development Studies

2014 - 2020

Geneva, Switzerland

Stochastic Processes for Economic Modelling

2020

- PhD Course, Lecturer

Econometrics 1

2014-2017

- Masters course, Teaching Assistant for Prof. Nicolas Berman

Macroeconomics 1

2017

- Masters course, Teaching Assistant for Prof. Cédric Tille

Macroeconomics 2

2015-2017

- Masters course, Teaching Assistant for Prof. Yi Huang

SEMINARS

Conferences and seminars in:

- OSWEET Conference, Cornell University (virtual, 2020)
- French Association of Environmental and Resource Economists (virtual, 2020)
- Monash University, Melbourne (virtual, 2020)
- IHEID (2015 2020)

- University of Geneva (2019)

- EPFL in Lausanne (2018, 2019)
- ETH in Zürich (2019)
- ISS in The Hague (2019)
- University of Padua (2017)
- University of Venice (2018).

PROGRAMMING

Main programming in R, Python and Mathematica.

Languages Subroutines in C++

OTHER EMPLOYMENT Active classical concert pianist, performing worldwide.

2002 - Present

European University Institute

2018-2019

- Research Associate

Banca Etica (Ethical Bank), Padova

2005-2006

Max-Olivier Hongler

- Risk Analyst

References

Jean-Louis Arcand Professor of Economics Department of International Economics The Graduate Institute (IHEID), Geneva jean-louis.arcand@graduateinstitute.ch Ugo Panizza Professor of Economics Department of International Economics The Graduate Institute (IHEID), Geneva ugo.panizza@graduateinstitute.ch

Didier Sornette Chair of Enterpreneurial Risks Department of Management, Technology and Economics (D-MTEC) ETH Zürich dsornette@ethz.ch

Professor Emeritus Statistical Physics, STI-DO École Polytechnique Fédérale de Lausanne (EPFL) max.hongler@epfl.ch