Daniele Rinaldo

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

Nationality: Italian

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

Website

CURRENT POSITION Visiting Scholar, Fellow

Department of Economics and Centre for Existential Risk

University of Cambridge, United Kingdom

Sponsor: Prof. Partha Dasgupta

Funded by the Swiss National Science Foundation

PREVIOUS POSITION Principal Investigator, Research Associate

December 2018 - August 2020

2018

The Graduate Institute of International and Development Studies, Geneva

EDUCATION The Graduate Institute of International and Development Studies,

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

Thesis title: Essays on Non-Gaussian Economics

Supervisor: 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

University of Padua: MSc in Quantitative Finance 2009

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 topics: malaria, schistosomiasis and cholera

Applications to Development, Environmental and Resource Economics of:

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

Contract theory, with a focus on continuous-time contracts and connections with optimal transportation theory. Applications to agricultural contracts in developing countries.

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 Science Foundation.

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

Working Papers

- Dams, Snails and Poverty Traps (job market paper, 2020)
- 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
- The Economic Impact of Schistosomiasis (2020)

 First author, joint with Jean-Louis Arcand, Javier Perez-Saez and Penelope Vounatsou submitted for review
- Scenes from a Monopoly: Quickest Detection of Ecological Regimes (2020)[Latest Version]

 Joint with Neha Deopa

 submitted for review
- Health Capital, Economic Growth and the Burden of Disease (2020)

 Joint with Jean-Louis Arcand
 part of The World Bank Human Capital Project
- Firm Decisions under Jump-Diffusive Dynamics (2019) [Latest Version] Joint with Neha Deopa submitted for review
- 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

2014-2017

2017

- PhD Course, Lecturer (March-May 2020, moved due to COVID-19)

Econometrics 1

- Masters course, Teaching Assistant for Prof. Nicolas Berman Macroeconomics 1

- Masters course, Teaching Assistant for Prof. Cédric Tille

- Masters course, Teaching Assistant for Prof. Cedric Till Macroeconomics 2

2015-2017

- Masters course, Teaching Assistant for Prof. Yi Huang

SEMINARS

Conferences and seminars in:

- ClimRisk 2020, Ca' Foscari University of Venice (virtual, 2020)
- 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, 2020)
- ISS in The Hague (2019)
- University of Padua (2017)
- Ca' Foscari University of Venice (2018).

Programming Languages

Main programming in R, Python and Mathematica.

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

- 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

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