GERY ANDRÉS DÍAZ RUBIO

Information Born in: Lima (Peru) · Citizenship: Peruvian · Residence: Bologna (Italy)

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Current Positions

Department of Statistical Sciences "Paolo Fortunati", University of Bologna
· PhD Fellow — *2018/11-Present*
· Teaching Assistant — *2020/09-Present*

Research Interests

Time Series · Econometric Theory · Model Selection · Developing Economies · Economic Analysis

Education

· PhD Statistical Sciences, University of Bologna, Italy — *2021/10*
Advisor: Prof. Simone Giannerini. Co-advisor: Dr. Greta Goracci. Research Project: Extension of the Misspecification-Resistant Information Criterion (MRIC) [Hsu, Ing, Tong (2019), Ann. Statist.] to parametric weakly-stationary multivariate time series models; Review of model selection criteria in parametric, nonparametric, and multivariate time series.

· MSc Economics & Economic Policy, University of Bologna, Italy — *2016/10*
Advisor: Prof. Roberto Scazzieri. Examiner: Prof. Roberto Golinelli. Field: Economic Analysis, Macro Econometrics. Dissertation title: "Dual Structures: Two Models for the Peruvian Economy".
Grade: *110/110*. GPA: *28.6*. University credits: 138/120.

· BSc Economics, University of Florence, Italy — *2012/07*
Advisor: Prof. Gabriele Fiorentini. Field: Financial Econometrics. Dissertation: "The standard CAPM and the GARCH(1,1) model in the Peruvian Stock Market" *(in Italian)*.
Grade: *96/110*. Major: *Financial Markets and Risk Management*

· Scientific Lyceum, Antonio Raimondi School, Lima (Peru). Grade: *100/100*.

Additional Courses

· School on Computational Statistics and Data Science, IASC–LARS–ISI
"Stochastic Simulation and Reinforcement Learning" — *2021/04/17-18*
Instructors: Prof. L. Enrique Sucar, Prof. Eduardo Morales *(Instituto Nacional de Astrofísica, Óptica y Electrónica)*, Prof. David Muñoz-Negrón *(Instituto Tecnológico Autónomo de México)*.
"Geostatistical Functional Data Analysis" — *2021/02/23-25*
Instructors: Prof. Martha Bohorquez, Prof. Ruben Guevara, Juan Guevara *(Universidad Nacional de Colombia)*.
"Statistical Inference in Markov Processes" — *2020/11/23-26*
Instructors: Prof. Verónica González-López, Prof. Jesús E. García *(University of Campinas)*.

· Bernoulli & Institute of Mathematical Statistics One World Symposium — *2020/08/24-28*
Virtual one week symposium on Probability and Mathematical Statistics. Keynote Speakers: Prof. Emmanuel Candes *(Stanford University)*, Prof. Martin Hairer *(University of London)*, Prof. Kerrie Mengersen *(University of Brisbane)* and Prof. Wendelin Werner *(ETH Zurich)*.

· Time Series Models: Theory and Applications, Ca' Foscari University — *2020/01/23-24*
2nd Italian Workshop of Econometrics and Empirical Economics. Keynote Speakers: Prof. Sylvia Frühwirth-Schnatter *(Wirtschaftsuniversität Wien)* and Prof. Oliver Linton *(University of Cambridge)*.

· Principles, Ideas and Theory in Econometric Time Series, CRUB — *2019/06/17-22*
Italian Econometric Society (SIdE) Summer School. Keynote Speakers: Prof. Søren Johansen and Prof. Anders Rahbek *(University of Copenhagen)*.

Academic Activities

· University of Bologna, Bologna — *2014-Present*
Teaching Assistant · Departments of Economics (DSE), Political and Social Sciences (DSPS), and Statistical Sciences (DSS) · Lectures, applications, tutorials (using R, Stata, Gretl or MS Excel) and examinations for the following courses:
· *Advanced Macro Econometrics* (Prof. R. Golinelli, MSc Economics and Economic Policy, DSE *2014*)
· *Econometrics 1* (Prof. C. Monfardini, MSc Economics, DSE *2015/2016*)
· *Econometrics 3* (Prof. C. Monfardini, MSc/PhD Economics, DSE *2015/2016*)
· *Data Mining and Business Decisions* (Prof. M. Freo, MSc Corporate Management, DSE *2015/2017*)
· *Macroeconomics* (Prof. A. Soci, BSc Political, Social and International Sciences, DSPS *2016/2017*)
· *Financial Markets and Institutions* (Dr. F. Palmucci, BSc Business and Economics, DSE *2017*)
· *Statistics* (Prof. M. Brizzi, MSc Quantitative Finance, DSS *2017/2018, 2019/2020*),
· *Advanced Micro Econometrics* (Prof. R. Golinelli, MSc Economics and Economic Policy, DSE *2017/2018*)
· *Statistics* (Prof. M. Ventrucci, BSc Tourism Economics, DSE *2019*)
· *Statistical Models for Market Research* (Prof. M. Freo, MSc Statistics, Economics and Business, DSS *2018/2020*)
· *Probability I* (Prof. A. Lanconelli, BSc Statistical Sciences (Stats&Maths), DSS *2020/present*)
· *Probability II* (Prof. A. Lanconelli, BSc Statistical Sciences (Stats&Maths), DSS *2020/present*)
· *Probability* (Prof. A. Lanconelli, MSc Statistics, Economics and Business, DSS *2020/present*)
· *Economics* (Prof. R. Bottazzi, BSc Statistical Sciences, DSS *2020/present*)

Previous Positions

· Ocem Energy Technology, Bologna *2017/02-2017/09*
`Controller` · Analysis and reorganization of financial data of *Ocem Airfield Technology* and *Ocem Power Electronics*. Support the redefinition project of both business and industrial processes. Support the alignment of both processes and information system (ERP). Daily controlling functions and data analysis. Responsible: Group Controller Ludmilla Raphet.

· Library of Agricultural Sciences & Amilcar Cabral Library, Bologna *2013/11-2015/07*
`Collaborator` · Responsible: Dr. Francesco Casadei and Dr. Elena Tripodi.

· GDR Tutoring, Bologna *2011/12-2018/10*
`Teaching and Research Assistant` · Tutorials and crash courses in R, Stata, Gretl, Eviews. Consultancy for data management, analysis, modelling and forecasting. Support graduate, undergraduate students, and professionals worldwide in quantitative subjects and technical projects.

Refereeing Activity

`Structural Change and Economic Dynamics` (2018, 1 paper)

Scholarships

· University of Bologna, `PhD Statistical Sciences` *2018-2021*

· University of Bologna, `MSc Economics and Economic Policy` *2012-2015*

Memberships

Italian Econometric Society · *International Association for Statistical Computing* · *Bernoulli Society*
Institute for Mathematical Statistics

Qualifications

· Languages: Spanish (mother tongue), Italian (mother tongue), English (fluent, B2 certificate)
· Packages: Eviews (advanced), Stata (advanced), Gretl (advanced), R (intermediate), Matlab (intermediate), Mathematica (basic)
· Others: MS Office, LaTeX(TeXstudio, LyX), ERP (SAM 4.2), MS Dynamics CRM, Wordpress, *Type 80 wpm*, Windows OS

Seminars (speaker)

· "Misspecification-Resistant Information Criterion for multivariate time series" *2021/02/04*
Department of Statistical Sciences, University of Bologna

· "Model Selection with Nonparametric Methods for Nonlinear Time Series" *2019/09/25*
Department of Economics, Universidad Nacional de Cuyo, Mendoza (Argentina)

· "Economic Crises: structural conditions and institutional mechanisms" *2019/04/05*
With Prof. Roberto Scazzieri (*University of Bologna, Accademia Nazionale dei Lincei*). Seminar cycle: *"Fare rizoma. Profili ecologici della razionalità contemporanea", Department of Philosophy and Communication, University of Bologna*

· "An introduction to game theory: conflicts and institutions" *2017/02/24*
Seminars: *"La Macchina da Guerra". Department of Philosophy and Communication, University of Bologna*

· "The 'economic miracle' of Fujimori's administration (1990-2000)" *2016/07*
Zonarelli centre, Bologna

Seminars, Conferences & Workshops (participant)

Department of Statistical Sciences, University of Bologna
· *"Greening Energy Market and Finance" (2020/11/17), "International Migration data: advances and challenges" (2020/02/13), "Topics on conditional moment equation models: goodness-of-fit and missing data" (2020/01/20-21), PhD Statistical Sciences seminars cycle (2018/2019, 2019/2020, 2020/2021), StaTalk - Young Italian Statistical Society Meeting (2019/03/29), Big Data for Multi-Agent Specialized System (2019/03/28)*

Department of Political and Social Sciences, University of Bologna
· *"Economic Geography of the Colombian Political Conflict" (2019/07/03)*

Institute of Advanced Studies, University of Bologna
· *"Mathematics that counts" (2021/03/23), "Extreme events: how to describe and predict them using mathematical theories" (2021/01/19), "Data in public communications, history, impact, and key lessons for scientists and policy-makers" (2020/12/01), "Organisational Learning and Adaptation to Address Complex Societal Challenges" (2020/11/17), "Rigour and aesthetics: Japanese traditional mathematics" (2019/11/19), "Using geometry to move robots quickly" (2019/10/29), "Social Media Research after the Fake New Debacle" (2019/10/22), "Stakeholder monitoring in banking" (2019/10/21), "Why the Trump era will last thirty years" (2019/04/16), "Work-Life Leadership: Managing Self and Others for Well-being On and Off the Job" (2019/03/05), "Dante and the Foundations of Argentine National Identity: Literature, Politics, and the Dream of a New Nation" (2019/02/12), "Bringing new medicines to market sooner? The statistical and economic challenges of value-based clinical trial design" (2019/11/27)*

Accademia Nazionale dei Lincei, Rome
· *International Conference "Rethinking Political Economy" (2019/04/10), Workshop "Structures and Transformations: an Interdisciplinary Matrix for Political Economy" (2017/10/26-27)*

Bank of Italy, Bologna
· *"Statistics for Economic Analysis" (2019/02/21), "Monetary Policy and the Stability of the Value of Money" (2019/01/24)*

OTHERS

"Live Showcase: Wolfram Technologies for Calculus, Algebra, Statistics and other Maths-Related Subjects" - Wolfram (2020/11/30), "Two days on CalcVar & PDEs" - Department of Mathematics UNIBO (2019/11/28-29), "The Mediterranean and the demographic fault"- Accademia delle Scienze (2019/05/16),"Critical Economics Summit" - INET and University of Bologna (2017/05/05-07), International Conference "Globalization, Human Capital, Regional Growth, and the 4th Industrial Revolution" - Emilia-Romagna Region (2017/10/20), "Chinese culture and language" and "Asian Economy" - PUCP (Peru) (2006/03-06)

Thesis work

· "DUAL STRUCTURES: TWO MODELS FOR THE PERUVIAN ECONOMY", *MSc in Economics and Economic Policy, Department of Economics, University of Bologna, 2016.*
Political economy analysis of Peru (1980-2016); construction of an institutional model; and study of a structured VAR model for the monetary policy transmission mechanism. With Eviews).

· "THE STANDARD CAPM AND THE GARCH(1,1) MODEL IN THE PERUVIAN STOCK MARKET", *BSc in Economics, Department of Economics, University of Florence, 2012.*
Empirical analysis of the CAPM using 29 firms listed on the Lima Stock Exchange during the period 2006-2012; estimation of a GARCH (1,1) model on the IGBVL (Bolsa de Valores de Lima General Sector Index). With Eviews. Original title: Analisi Econometrica del CAPM nel mercato azionario peruviano.

Work in progress

· "TOWARDS THE VECTORIAL MRIC: AN ASYMPTOTIC EXPRESSION FOR THE MSPE MATRIX IN WEAKLY STATIONARY MULTIVARIATE TIME SERIES", *2021*.

· "A PATH TO MULTIVARIATE TIME SERIES MODEL SELECTION", *2021*.

· "THE INSTITUTION OF SYSTEMIC CORRUPTION IN PERU", *2017*. JEL CODES: D73, B52, O54. *Research proposal selected by the PhD School of Legal and Economic Sciences, University of Verona - BPM Scholarship (not accepted).*

· "A STRUCTURED – VAR APPROACH FOR THE MONETARY TRANSMISSION MECHANISM IN PERU", *2017*. JEL CODES: C32, C36, C5, E52.

· "ECONOMIC AND SOCIAL CO-ORDINATION IN PERU FROM AN INSTITUTIONAL AND GAME-THEORETICAL PERSPECTIVE", *2017*. JEL CODES: O54, B52, O17, P48.

Conference paper

· "ON THE ASYMPTOTIC MEAN-SQUARED PREDICTION ERROR FOR MULTIVARIATE TIME SERIES", SIS 2021 Book of Short Papers. Eds. C. Perna, N. Salvati, F. Schirripa Spagnolo. Pearson, 2021. 50th Scientific Meeting of the Italian Statistical Society, Pisa 21-25 June 2021. ISBN: 9788891927361.

Interests

Travelling · Guitar · Percussions

References

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