# Personal Information


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| **Names/Surnames** | Gery Andrés Díaz Rubio |
| **Office** | Via Belle Arti, 41, Bologna 40126, Italy<br>Piazzetta Teatini, 10, Rimini 47921, Italy |
| **E-mail** | geryandre.diazrubio2@unibo.it |
| **Website** | www.unibo.it/sitoweb/geryandre.diazrubio2 |
| **Nationality** | Peruvian |


# Current positions

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|---|---|
| **Date** | 2022/07–Present |
| **Institution** | Department of Statistical Sciences "Paolo Fortunati", University of Bologna |
| **Role** | Adjunct Professor |
| **Course** | Analisi delle Serie Storiche per la Finanza e le Assicurazioni (L. Statistica, Finanza e Assicurazione) (mutated from "Metodi Statistici per i Mercati Finanziari", L. Finanza, Assicurazione e Impresa) |

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|---|---|
| **Date** | 2022/01–Present |
| **Institution** | Department of Statistical Sciences "Paolo Fortunati", University of Bologna |
| **Role** | Research Fellow |
| **Project** | Dynamic panel data modelling of the Italian football league statistics |
| *Supervisor* | Prof. Simone Giannerini |
| *Co-supervisors* | Prof. Massimiliano Castellani, Prof. Francesco Angelini |
| *External advisor* | Dr. Greta Goracci (University of Bozen-Bolzano) |

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|---|---|
| **Date** | 2023/09–Present |
| **Institution** | Department of Statistical Sciences "Paolo Fortunati", University of Bologna |
| **Role** | Instructor and Teaching Assistant |
| *Subjects* | · Stochastic Processes (Prof. S. Giannerini, MSc Statistical, Financial and Actuarial Sciences, DSS 2021/present)<br>· Introductory Statistics (Prof. S. Giannerini, BSc Genomics, DPB 2021/present)<br>· Econometrics crash course (Prof. L. Fanelli, MSc Statistical, Financial, and Actuarial Sciences, DSS 2022/present) |

# Past positions

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| **Date** | 2014–2023/08 |
| **Institution** | Departments of Economics (DSE), Political and Social Sciences (DSPS), Statistical Sciences (DSS), and Pharmacy and Biotechnology (DPB), University of Bologna |
| **Role** | Teaching Assistant |
| *Subjects* | · Probability I (Prof. A. Lanconelli, BSc Statistical Sciences (Stats&Maths), DSS 2020/2023)<br>· Probability II (Prof. A. Lanconelli, BSc Statistical Sciences (Stats&Maths), DSS 2020/2023)<br>· Probability (Prof. A. Lanconelli, MSc Statistics, Economics and Business, DSS 2020/2023)<br>· Political Economy (Prof. R. Bottazzi, BSc Statistical Sciences, DSS 2021/2022)<br>· Metodi Statistici per i Mercati Finanziari (Prof. S. Giannerini, L. Finanza, Assicurazione e Impresa DSS 2021/2022)<br>· Economics (Prof. R. Bottazzi, BSc Statistical Sciences, DSS 2020/2022)<br>· Statistical Models for Market Research (Prof. M. Freo, MSc Statistics, Economics and Business, DSS 2018/2020)<br>· Statistics (Prof. M. Ventrucci, BSc Tourism Economics, DSE 2019) |

· Advanced Micro Econometrics (Prof. R. Golinelli, MSc Economics and Economic Policy, DSE 2017/2018)
· Statistics (Prof. M. Brizzi, MSc Quantitative Finance, DSS 2017/2018, 2019/2020)
· Financial Markets and Institutions (Dr. F. Palmucci, BSc Business and Economics, DSE 2017)
· Macroeconomics (Prof. A. Soci, BSc Political, Social and International Sciences, DSPS 2016/2017)
· Data Mining and Business Decisions (Prof. M. Freo, MSc Corporate Management, DSE 2015/2017)
· Econometrics 3 (Prof. C. Monfardini, MSc/PhD Economics, DSE 2015/2016)
· Econometrics 1 (Prof. C. Monfardini, MSc Economics, DSE 2015/2016)
· Advanced Macro Econometrics (Prof. R. Golinelli, MSc Economics and Economic Policy, DSE 2014)

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| **Date** | 2017 |
| **Institution** | Ocem Energy Technology, Bologna |
| **Role** | Controller |
| **Responsible** | Ludmilla Raphet (Group Controller) |
| *Details* | · Analysis and reorganization of financial data of Ocem Airfield Technology and Ocem Power Electronics<br>· Support the redefinition project of both business and industrial processes<br>· Support the alignment of both processes and information system (ERP)<br>· Daily controlling functions and data analysis |

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| **Date** | 2013–2015 |
| **Institution** | Library of Agricultural Sciences & Amilcar Cabral Library, Bologna |
| **Role** | Collaborator |
| **Responsible** | Dr. Francesco Casadei and Dr. Elena Tripodi |

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|---|---|
| **Date** | 2011–2018 |
| **Institution** | GDR Tutoring, Bologna |
| **Role** | Teaching and Research Assistant |
| *Details* | · Tutorials and crash courses in R, Stata, Gretl, Eviews, Matlab, Minitab, Python, Julia<br>· Consultancy for data management, analysis, modelling and forecasting<br>· Support graduate, undergraduate students, professionals and researchers worldwide in quantitative subjects and technical projects |

## Education and Training

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|---|---|
| **Date** | 2022/10 |
| **Degree** | PhD Statistical Sciences (with grant) |
| **Institution** | University of Bologna, Italy |
| **Advisor** | Prof. Simone Giannerini |
| **Co-advisor** | Dr. Greta Goracci (University of Bozen-Bolzano) |
| **Sector** | 13/D1 Statistica. SSD: SECS-S/01 |
| **Ph.D. thesis title** | "Model selection and the vectorial Misspecification-Resistant Information Criterion in multivariate time series" |
| **Summary** | Extension of the MRIC [Hsu, Ing, Tong (2019), Ann. Statist.] to parametric covariance-stationary multivariate time series models; Two surveys on model selection criteria for i.i.d. data and for parametric, nonparametric, and multivariate time series. |
| **Reviewers** | Prof. Davide Ferrari (University of Bozen-Bolzano), Prof. Pietro Coretto (University of Salerno) |
| **PhD Board** | Prof. Tommaso Proietti (Tor Vergata University), Prof. Mikkel Bennedsen (University of Aarhus, Denmark), Prof. Paolo Guasoni (University of Bologna) |

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|---|---|
| **Date** | 2016/10 |
| **Degree** | MSc Economics & Economic Policy (with grant) |
| **Institution** | University of Bologna, Italy |
| **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 |
| **CFU** | 138/120 |

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|---|---|
| **Date** | 2012/07 |
| **Degree** | BSc Economics |
| **Institution** | University of Florence, Italy |
| **Advisor** | Prof. Gabriele Fiorentini |
| **Field** | Financial Econometrics |
| **Dissertation title** | "The standard CAPM and the GARCH(1,1) model in the Peruvian Stock Market" (in Italian) |
| **Major** | Financial Markets and Risk Management |

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| **Degree** | Scientific Lyceum |
| **Institution** | Antonio Raimondi School, Lima (Peru) |
| **Grade** | 100/100 |

## Additional courses

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| **Date:** | 2023/04/1-3 |
| **Institution:** | Bolzano-Waseda Workshop, Statistics & Time Series Analysis |
| **Keynote Speakers:** | Prof. Masanobu Taniguchi (Waseda University), Prof. Howell Tong (LSE, Tsinhua University), Prof. Yao Qiwei (LSE). |

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|---|---|
| **Date:** | 2022/02/01-03 |
| **Institution:** | School on Computational Statistics and Data Science, IASC–LARS–ISI |
| **Course:** | "Time Series Robust Methods: Time and Frequency Domains" |
| **Instructors:** | Prof. Valdério Anselmo Reisen (PPGEA, PPGEco, PPGMAT-UFES, Brazil and CentraleSupeléc-ParisSaclay, France). |

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|---|---|
| **Date:** | 2021/11/22-24 |
| **Institution:** | School on Computational Statistics and Data Science, IASC–LARS–ISI |
| **Course:** | "Data Visualization, Theory and Applications" |
| **Instructors:** | Prof. Natalia da Silva (Universidad de la República, Uruguay). |

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| **Date:** | 2021/09/27-30 |
| **Institution:** | School on Computational Statistics and Data Science, IASC–LARS–ISI |
| **Course:** | "Machine Learning for Data Science" |
| **Instructors:** | Prof. Rodrigo Salas Fuentes, Ayleen Bertini, Prof. Javier L. López Gonzales, Prof. Marvin Querales (Universidad de Valparaiso, Chile). |

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| **Date:** | 2021/04/17-18 |
| **Institution:** | School on Computational Statistics and Data Science, IASC–LARS–ISI |
| **Course:** | "Stochastic Simulation and Reinforcement Learning" |
| **Instructors:** | Prof. L. Enrique Sucar, Prof. Eduardo Morales (Instituto Nacional de Astrofísica, Óptica y Electrónica), Prof. David Muñoz-Negrón (Instituto Tecnológico Autónomo de México). |

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| **Date:** | 2021/02/23-25 |
| **Institution:** | School on Computational Statistics and Data Science, IASC–LARS–ISI |
| **Course:** | "Geostatistical Functional Data Analysis" |
| **Instructors:** | Prof. Martha Bohorquez, Prof. Ruben Guevara, Juan Guevara (Universidad Nacional de Colombia). |

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|---|---|
| **Date:** | 2020/11/23-26 |
| **Institution:** | School on Computational Statistics and Data Science, IASC–LARS–ISI |
| **Course:** | "Statistical Inference in Markov Processes" |
| **Instructors:** | Prof. Verónica González-López, Prof. Jesús E. García (University of Campinas). |

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|---|---|
| **Date:** | 2020/08/24-28 |
| **Institution:** | Bernoulli & IMS One World Symposium |
| **Details:** | 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). |

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

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|---|---|
| **Date:** | 2019/06/17-22 |
| **Institution:** | Italian Econometric Society and CRUB |
| **Course:** | Principles, Ideas and Theory in Econometric T.S. |
| **Details:** | Italian Econometric Society (SIdE) Summer School. |
| **Keynote Speakers:** | Prof. Søren Johansen and Prof. Anders Rahbek (University of Copenhagen). |

## Working Papers and Technical Reports

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| WP1 | Angelini, F.; Castellani, M.; Diaz Rubio, G.A.; Giannerini, S.; Goracci, G.; Decoding the Game: An Empirical Analysis of the Strategic and Tactical Role of Coaches in the Serie A, *Submitted*, 2024 |
| WP2 | Visentin, M.; Tuan, A.; Giannerini, S.; Diaz Rubio, G.A.; Between Flow and Satiation: The Temporal Impact of Emotions in Online Video Gamers' Reviews on Daily Active Players, *Submitted*, 2024 |
| WP3 | Diaz Rubio, G.A.; Giannerini, S.; Goracci, G.; The Vectorial Misspecification-Resistant Information Criterion, https://arxiv.org/abs/2211.08205, 2022 |
| WP4 | Diaz Rubio, G.A.; Model Selection via Information and Prediction Criteria: A Survey, 2022 |
| TR1 | Diaz Rubio, G.A.; The Institution of Systemic Corruption in Peru. JEL codes: D73, B52, O54. Research proposal selected by the PhD School of Legal and Economic Sciences, University of Verona - BPM Scholarship, 2017 |
| TR2 | Diaz Rubio, G.A.; A Structured – VAR Approach for the Monetary Transmission Mechanism in Peru. JEL codes: C32, C36, C5, E52, 2017 |
| TR3 | Diaz Rubio, G.A.; Economic and Social Co-ordination in Peru from an Institutional and Game-Theoretical Perspective. JEL codes: O54, B52, O17, P48, 2017 |

## Publications in Conference Proceedings

CP1 | Diaz Rubio, G.A.; Giannerini, S.; Goracci, G.; On the asymptotic mean-squared prediction error for multivariate time series, in: Proceedings of the 50th scientific meeting of the Italian Statistical Society, 2021, (Pisa, June 21–25, 2021) pp. 1-6. ISBN: 9788891927361

## Presentations at Conferences

C1 | Diaz Rubio, G.A.; Angelini, F.; Castellani, M.; Giannerini, S.; Goracci, G.; On Home Advantage with In-Game Variables from Commentary Data in the Italian Serie A, EAI Intetain 2023. IMT – School for Advanced Studies Lucca, 2023

C2 | Diaz Rubio, G.A.; Giannerini, S.; Goracci, G.; A Multivariate Extension of the Misspecification Resistant Information Criterion, 3rd Italian Workshop of Econometrics and Empirical Economics: "High-Dimensional and Multivariate Econometrics: Theory and Practice" (IWEEE 2022). Organized by the Italian Econometric Society (SIdE), Rimini Campus, University of Bologna, January 20-21, 2022

C3 | Diaz Rubio, G.A.; Giannerini, S.; Goracci, G.; On the asymptotic mean-squared prediction error for multivariate time series, 50th scientific meeting of the Italian Statistical Society, Pisa, June 21-25, 2021

## Seminar Presentations

S1 | Diaz Rubio, G.A.; The Vectorial Misspecification-Resistant Information Criterion and Model Selection with Multivariate Time Series, Department of Statistical Sciences, University of Bologna, December 9, 2021

S2 | Diaz Rubio, G.A.; Misspecification-Resistant Information Criterion for Multivariate Time Series, Department of Statistical Sciences, University of Bologna, February 4, 2021

S3 | Diaz Rubio, G.A.; Model Selection with Nonparametric Methods for Nonlinear Time Series, Department of Economics, Universidad Nacional de Cuyo, Mendoza (Argentina), September 25, 2019

## Other Presentations at Conferences

· | Giannerini, S.; Diaz Rubio, G.A.; Goracci, G.; Consistent and efficient model selection with possible misspecification for vector time series, Complex time series analysis: high-dimensionality, change-point, forecasting and causality, TSIMF, Sanya, China, January 3-7, 2024

· | Giannerini, S.; Diaz Rubio, G.A.; Goracci, G.; Consistent and efficient model selection with possible misspecification for vector time series, 4th Italian Workshop of Econometrics and Empirical Economics: "Climate and Energy Econometrics", Free University of Bolzano, January 25-26, 2024

· | Giannerini, S.; Diaz Rubio, G.A.; Goracci, G.; Consistent and efficient model selection with possible misspecification for vector time series, 2nd Bergamo Workshop in Econometrics and Statistics, University of Bergamo, September 7-8, 2023

- Giannerini, S.; Diaz Rubio, G.A.; Goracci, G.; The Multivariate Misspecification-Resistant Information Criterion, Waseda-Bolzano workshop on Statistics and time series analysis, Selva di val Gardena, April 1-3, 2023

## Dissemination

- Diaz Rubio, G.A.; Economic Crises: Structural Conditions and Institutional Mechanisms, With Prof. Scazzieri, R. (University of Bologna, Accademia Nazionale dei Lincei). Seminar cycle: “Fare rizoma. Profili ecologici della razionalità contemporanea”, Department of Philosophy and Communication, University of Bologna, April 5, 2019

- Diaz Rubio, G.A.; An Introduction to Game Theory: Conflicts and Institutions, Seminars: “La Macchina da Guerra”. Department of Philosophy and Communication, University of Bologna, February 24, 2017

- Diaz Rubio, G.A.; The ’Economic Miracle’ of Fujimori’s Administration (1990-2000), Zonarelli centre, Bologna, July 2016

## Thesis Work

**Year:** 2016
**Title:** Dual Structures: Two Models for the Peruvian Economy
**Degree:** MSc in Economics and Economic Policy
**Institution:** Department of Economics, University of Bologna
**Details:** 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 using Eviews.

**Year:** 2012
**Title:** The standard CAPM and the GARCH(1,1) model in the Peruvian Stock Market
**Degree:** BSc in Economics
**Institution:** Department of Economics, University of Florence
**Details:** 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), using Eviews. Original title: Analisi Econometrica del CAPM nel mercato azionario peruviano.

## Memberships

- Italian Econometric Society from 2019
- International Association for Statistical Computing (International Statistical Institute) from 2019
- Bernoulli Society from 2020
- Institute of Mathematical Statistics from 2021
- Italian Statistical Society from 2021

## Scholarships

- University of Bologna, PhD Statistical Sciences, 2018–2022
- University of Bologna, MSc Economics and Economic Policy, 2012–2015

## Service as referee

· | Structural Change and Economic Dynamics (2018)

## Personal Skills and Competencies

**First language:** Spanish

**Other languages:** *Self-assessment according to the European framework:*

| | Listening | Reading | Spoken Interaction | Spoken Production | Writing |
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| **Italian** | C1 | C1 | C1 | C1 | C1 |
| **English** | C1 | C1 | C1 | C1 | C1 |

*(*) Common European Framework of Reference (CEF) level*

**Software:** R (advanced), Eviews (advanced), Stata (advanced), Gretl (advanced), Matlab (intermediate), Mathematica (basic), Python (basic), Julia (basic), SAS (basic), Prism (basic)

**Others:** MS Office, LaTeX (TeXstudio, LyX, Overleaf), ERP (SAM 4.2), MS Dynamics CRM, WordPress, Type 80 wpm, Windows OS

## Seminars, Conferences & Workshops (participant)

**Institution:** Department of Statistical Sciences, University of Bologna

**Details:** Statistical Sciences Department seminars cycle (2022/2023, 2023/2024) · "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 (2018/2022) · StaTalk - Young Italian Statistical Society Meeting (2019/03/29) · Big Data for Multi-Agent Specialized System (2019/03/28)

**Institution:** Institute of Advanced Studies, University of Bologna

**Details:** "Ruins Past and Future: Four Ways of Looking at History" (2022/09/06) · "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 policymakers" (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 News 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)

**Institution:** Accademia Nazionale dei Lincei, Rome

**Details:** International Conference "Rethinking Political Economy" (2019/04/10) · Workshop "Structures and Transformations: an Interdisciplinary Matrix for Political Economy" (2017/10/26-27)

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

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

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| **Institution:** | Others |
| **Details:** | "How to write a scientific paper" - VPH Institute (2021/06/11) · "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) |

## Research Interests

*Time Series · Econometric Theory · Model Selection · Sport Statistics & Economics · Dynamic Panel Data Models*

## Further Interests

Travelling · Music: Guitars & Percussions · Videogames

## References

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| **Name:** | Professor Simone Giannerini |
| **Institution:** | Dept. of Statistical Sciences "Paolo Fortunati", University of Bologna |
| **Phone:** | (+39) 051 2098262 |
| **Email:** | simone.giannerini@unibo.it |

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|---|---|
| **Name:** | Assistant Professor Greta Goracci |
| **Institution:** | Faculty of Economics and Management, Free University of Bozen-Bolzano |
| **Email:** | greta.goracci@unibz.it |

**Name:** Gery A. Díaz Rubio, Ph.D.
**Date:** August 30, 2024