Federico Crudu - Agosto 2025

Recapiti

Piazza San Francesco, 7-8
DEPS
Università di Siena
Siena, Italia.

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Interessi di ricerca e docenza

Econometria e statistica (verosimiglianza empirica, metodo dei momenti generalizzato, variabili strumentali, teoria asintotica con molti strumenti); econometria applicata.

Istruzione

University of York, York, Regno Unito

D. Phil. Economics, 23 gennaio 2010

- Titolo della tesi: "Essays on Generalized Empirical Likelihood and Time Series"
- Relatori: Dr. Francesco Bravo, Dr. Fabrizio Iacone
- Commissione di dottorato: Dr. Patrick Marsh, Dr. Jan Podivinsky

University of Warwick, Coventry, Regno Unito

M.Sc. Economics, gennaio 2005

Università di Cagliari, Cagliari, Italia

Laurea in Scienze Politiche, febbraio 2003

Esperienza professionale

Università di Siena, Siena, Italia
Professore associato **2023 - ad oggi**

Università di Siena, Siena, Italia
RTD-B **2016 - 2023**

Pontificia Universidad Católica de Valparaíso, Valparaíso, Cile
Ricercatore **2013 - 2017**

Università di Sassari, Sassari, Italia
Postdoc **2011 - 2013**

Rijksuniversitet Groningen, Groninga, Paesi Bassi
Postdoc **2009 - 2011**

CRENoS, Cagliari, Italia.
Ricercatore associato **2003 - ad oggi**

HEDG, University of York, York, Regno Unito.
Ricercatore affiliato **2018 - ad oggi**

Administration

Membro del comitato per la didattica della LM in Economics, Università degli Studi di Siena (link). **2024 - ad oggi**

Membro del consiglio del Dottorato in Economia delle università toscane (link). **2024 - ad oggi**

Coordinatore Erasmus, Università degli Studi di Siena. **2017 - ad oggi**

Ricerca in corso

An Invariant Modification of the Bilinear Form Test (with A. Garate and F. Osorio), *2025. Submitted Sankhya, Series A.*

Expert Opinions and the Assessment of Tipping Points (with M. Basili), *2025. Submitted Environmental Modeling & Assessment.* (current version).

Terror and Turnout (with C. Caporali and C. Detotto), *2024.*

Jackknife Instrumental Variable Inference (with G. Mellace and Z. Sándor), *2023.*

Errors-in-Variables Models with Many Proxies (with A. Moharir and Z. Sándor), *2023* (first version).

Pubblicazioni

On the Role of the Zero Conditional Mean Assumption for Causal Inference in Linear Models (with M. C. Knaus, G. Mellace and J. Smits). (current version). *Forthcoming Canadian Journal of Economics.*

The Gray Zone: How not Imposing a Strict Lockdown at the Beginning of a Pandemic Can Cost Many Lives (with R. Di Stefano, G. Mellace and S. Tiezzi), *2024*, *Labour Economics.* (link).

Narrow and Wide Replication of Chalfin and McCrary (REStat, 2018) (with A. Moharir), *2024*, *Journal of Applied Econometrics.* (link and replication files).

Blockwise Euclidean Likelihood for Spatio-Temporal Covariance Models (with M. Bevilacqua and V. Morales), *2021*, **20**, 176-201, *Econometrics and Statistics* (link).

Inference in Instrumental Variables Models with Heteroskedasticity and Many Instruments (with G. Mellace and Z. Sándor), *2021*, **37**(2), 281-310, *Econometric Theory* (link).

Family Ties and Child Obesity in Italy (with L. Neri and S. Tiezzi), *2021*, **40**, 100951, *Economics and Human Biology* (link).

Bilinear Form Test Statistics for Extremum Estimation (with F. Osorio), *2020*, 108885, *Economics Letters* (link).

Z-Estimators and Auxiliary Information for Strong Mixing Processes (with E. Porcu), *2019, Stochastic Environmental Research and Risk Assessment*, **33**, 1-11 (link).

Innovation and Cost Efficiency in the Banking Industry: the Role of Electronic Payments (with G. Ardizzi and C. Petraglia), *2019, Economic Notes*, **48**, 12121 (link).

On the Finite Sample Properties of Conditional Empirical Likelihood Estimators (with Z. Sándor), *2017, Communications in Statistics - Simulation and Computation*, **46**, 1520-1545 (link).

Jackknife Instrumental Variable Estimation with Heteroskedasticity (with P. A. Bekker), *2015, Journal of Econometrics*, **185**, 332-342 (link).

Combining Euclidean and Composite Likelihood for Binary Spatial Data Estimation (with M. Bevilacqua and E. Porcu), *2015, Stochastic Environmental Research and Risk Assessment*, **29**, 335-346 (link).

Efficient Bootstrap with Weakly Dependent Processes (with F. Bravo), *2012, Computational Statistics and Data Analysis*, **56**, 3444-3458 (link).

Altre pubblicazioni

Discussion on "Causal inference by using invariant prediction: identification and confidence intervals" by J. Peters et al. (con F. López e E. Porcu), *2016 Journal of the Royal Statistical Society, B*, **78**, 995-996.

Discussion on "Multiscale change point inference" by K. Frick et al. (con E. Porcu e M. Bevilacqua), *2014 Journal of the Royal Statistical Society, B*, **76**, 546.

Attività di referaggio

Review of Economic Studies (1), Journal of Wine Economics (1), Research Grants Council of Hong Kong (2), Communications in Statistics – Theory and Methods (1), Japanese Journal of Data Science and Statistics (1), Econometrics and Statistics (1), Network Science (1), Computational Economics (2), Economics and Human Biology (1), Italian Economic Journal (1), Journal of Multivariate Analysis (2), Environmetrics (1), Economic Notes (1), Bulletin of Economic Research (1), Advances in Statistical Analysis (1), Health Economics (1), Cogent Economics and Finance (2), Cogent Mathematics (1), Statistical Methods and Applications (1), Spring Meeting of Young Economists (2), Stochastic Environmental Research and Risk Assessment (4), Journal of Econometrics (1).

Conferenze organizzate

- Siena Workshop on Econometric Theory and Applications, Siena (Italia), 2023 (link).
- Membro del comitato per il programma scientifico della 12th International Conference of the ERCIM WG on Computational and Methodological Statistics, Londra (Regno Unito), 2019.
- Sessione su "Topics in Spatial and Space-Time Statistics" presso 12th International Conference of the ERCIM WG on Computational and Methodological Statistics, Londra (Regno Unito), 2019.
- Sessione su "Instrumental Variables: Theory and Applications" presso 11th International Conference of the ERCIM WG on Computational and Methodological Statistics, Pisa (Italia), 2018.
- Membro del comitato organizzatore locale della II Latin American Conference on Statistical Computing, Valparaiso, 9-11 Marzo 2017.

Progetti di ricerca

- PRIN 2022 (Italian Government) *SHE-WINS: Stem in Higher Education & Women INequalitieS* (Researcher; Principal Inverstigator Antonella D'Agostino). (link)
- F-CUR (University of Siena): *Jackknife Instrumental Variable Inference* (about 17000 Euros, 2022-2023).
- F-CUR (Università di Siena): *Jackknife Instrumental Variable Inference* (circa 17000 Euro, 2022-2023).
- Fondecyt Regular (Governo della Repubblica del Cile): *Modeling and Estimation of Multivariate Spatio Temporal Random Fields* (ricercatore associato; Principal Investigator Moreno Bevilacqua, circa 110000 Euro, 2016-2020).
- Fondecyt Iniciación en Investigación (Governo della Repubblica del Cile): *Inference in Instrumental Variable Models with Heteroskedasticity* (circa 75000 Euro, 2014-2016).

Presentazioni a conferenze

2025: International Association for Applied Econometrics Conference, Turin, Italy. ***2024***: Rome Workshop on Econometrics: Frontiers in Causal Inference, Rome, Italy; University of Groningen Workshop on Causal Inference + Machine Learning, Groningen, The Netherlands. ***2023***: Siena Workshop on Econometric Theory and Applications, Siena, Italy; Tenth Italian Congress of Econometrics and Empirical Economics, Cagliari, Italy. ***2022***: Nordic Health Economic Study Group 2022, Gothenburg, Sweden. ***2019***: Nordic Health Economic Study Group 2019, Reykjavik, Iceland; International Association for Applied Econometrics Conference, Nicosia, Cyprus. ***2018***: Eighth

Italian Congress of Econometrics and Empirical Economics, Lecce, Italy; 11th International Conference of the ERCIM WG on Computational and Methodological Statistics, Pisa, Italy. ***2016***: Econometrics and Financial Statistics Workshop, Valparaiso, Chile. ***2015***: Workshop on Applied Microeconomics and Microeconometrics, Universidad de Alicante, Alicante, Spain. ***2014***: LXXXIII Encuentro Anual Sociedad de Matematica de Chile; IV Jornada de Investigación en Ciencias de la Pontificia Universidad Católica de Valparaíso. ***2013***: LATAM Workshop in Econometrics, São Paulo School of Economics, São Paulo, Brazil; First Workshop on Seismomatics, Concepción, Chile; XL Jornadas Nacionales de Estadistica, Valparaiso, Chile; XIX Semana de la Estadistica en Valparaiso, Valparaiso, Chile; Italian Congress on Econometrics and Empirical Economics, Genova, Italy. ***2012***: Spring Meeting of Young Economists, Mannheim; Recent Developments in Time Series Analysis, University of Sassari, Sassari. ***2011***: NAKE Day, Utrecht, The Netherlands; STATEC, Luxemburg. ***2010***: Spring Meeting of Young Economists, Luxemburg; Nederlands Econometrics Study Group Conference, Leuven, Belgium; Royal Economic Society Conference, Guildford, UK. ***2009***: 3rd International Conference on Computational and Financial Econometrics,Limassol; RES PhD meeting, London, UK.

Seminari

2024: Università degli Studi di Genova, Genova, Italia. ***2023***: St. Petersburg State University (online), Russia. ***2022***: Gran Sasso Science Institute, L'Aquila, Italia. ***2020***: VERB Seminar (online), Cornell University, Stati Uniti. ***2019***: PUC, Santiago del Cile, Cile. ***2018***: Università degli Studi di Cagliari, Cagliari, Italia; Università degli Studi di Siena, Siena, Italia. ***2017***: Università degli Studi di Sassari, Sassari, Italia. ***2016***: Università di Corsica Pasquale Paoli, Corte, Francia. ***2015***: Universidad Adolfo Ibañez, Viña del Mar, Cile; Syddansk Universitet, Odense, Denmark; Università degli Studi di Cagliari, Cagliari, Italia. ***2014***: Università Ca' Foscari, Venezia, Italia; Pontificia Universidad Católica de Chile, Santiago del Cile, Cile. ***2012***: Università degli Studi di Cagliari, Cagliari, Italia. ***2011***: University of Exeter, Exeter, Regno Unito. ***2009***: Rijksuniversitet Groningen, Groninga, Paesi Bassi. ***2008***: University of York, York, Regno Unito; Università degli Studi di Cagliari, Cagliari, Italia.

Competenze informatiche

- Pacchetti statistici: R, Julia.
- Applicazioni: LaTeX (TeX works), LibreOffice.
- Sistemi operativi: Linux (Mint, Ubuntu), MacOS.

Competenze linguistiche

Italiano (lingua madre), sardo (lingua madre), inglese (avanzato), spagnolo (intermedio).