ILYA ARCHAKOV

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EMPLOYMENT

York University   since 2023
Assistant Professor (Department of Economics)

University of Vienna   2017 - 2023
Postdoctoral Researcher (Department of Statistics and Operations Research, ISOR)

EDUCATION

European University Institute   2011 - 2016
Ph.D. in Economics (December, 2016)
Supervisors: Peter Reinhard Hansen, Juan Jóse Dolado

New Economic School (Moscow)   2009 - 2011
MA in Economics

Moscow Institute of Physics and Technology   2003 - 2009
BSc and MSc in Physics and Applied Mathematics

RESEARCH

Research Interests

Financial Econometrics, Multivariate and High Dimensional Econometrics, Time Series Modeling, Econometrics of High Frequency Data, Empirical Market Microstructure, Econometrics of Options Data, Big Data in Finance

Published and Forthcoming Papers

· "Canonical Representation of Block Matrices with Applications to Covariance and Correlation Matrices." (*with Peter Hansen*) *The Review of Economics and Statistics*, forthcoming
· "Local Mispricing and Microstructural Noise: a Parametric Perspective." (*with Torben Andersen, Gökhan Cebiroglu and Nikolaus Hautsch*) *Journal of Econometrics*, 230(2), 510-534, 2022
· "A New Parametrization of Correlation Matrices." (*with Peter Hansen*) *Econometrica*, 89(4), 1699-1715, 2021
· "A Descriptive Study of High-Frequency Trade and Quote Option Data." (*with Torben Andersen et al.*) *Journal of Financial Econometrics*, 19(1), 128-177, 2021
· "A Markov Chain Estimator of Multivariate Volatility from High Frequency Data." (*with Peter Hansen, Guillaume Horel and Asger Lunde*) *The Fascination of Probability, Statistics and their Applications: In Honour of Ole E. Barndorff-Nielsen*, Springer, 2016

Working Papers

· "A New Method for Generating Random Correlation Matrices." (*with Peter Hansen and Yiyao Luo*) [*Conditionally accepted in The Econometrics Journal*]
· "A Multivariate Realized GARCH Model." (*with Peter Hansen and Asger Lunde*) [*Submitted*]
· "A Realized Dynamic Nelson-Siegel Model with an Application to Crude Oil Futures Prices." (*with Bo Laursen*)
· "Amazing Properties of a Vector Representation of Correlation Matrices." (*with Peter Hansen*)

REFERENCES

Peter R. Hansen	Nikolaus Hautsch	Asger Lunde
Professor of Economics	Professor of Finance and Statistics	Research Fellow
University of North Carolina	University of Vienna	Aarhus University
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TEACHING

Statistics for Economists I Fall 2023
Instructor, Undergraduate Course *York University*

Econometrics II (advanced course in econometrics) Spring/Summer 2022
Instructor, Graduate Course *University of Vienna*

Financial Econometrics and Empirical Finance Spring/Summer 2018 – 2023
Lecturer, Graduate Course *University of Vienna*

Time Series Econometrics Fall/Winter 2014, 2015
Teaching Assistant, Graduate Course *European University Institute*

Microeconomics Fall/Winter 2012
Teaching Assistant, Graduate Course *European University Institute*

RELEVANT EXPERIENCE

Referee Activity	Journal of Econometrics, Journal of Business & Economic Statistics, Journal of Financial Econometrics, Annals of Applied Statistics, Journal of International Forecasting, Econometrics and Statistics, Quantitative Finance, The Energy Journal, Journal of Futures Markets, Studies in Nonlinear Dynamics & Econometrics, Scandinavian Journal of Statistics
Research Work	Project Assistant (*Oct 2016 - Feb 2017, Aarhus University, CREATES*); Research Assistant (*Nov 2014 - Feb 2015, European University Institute*); Research Assistant (*Jul - Aug 2010, New Economic School*)
Research Visits	University of North Carolina at Chapel Hill (*Nov 2018*), Lancaster University (*Sep 2018*), Aarhus University, CREATES (*Oct 2016 - Feb 2017, Nov 2014*)
Research Grants and Scholarships	"Econometrics of CCP Risk", co-applicant and co-investigator (by FWF, 2020-23); PhD Scholarship Grant (by Italian Ministry of Foreign Affairs, 2011-15); Full Tuition Scholarship (New Economic School, 2009-11)
Other	Teaching Training Certificate (June 2016, European University Institute)

CONFERENCE PARTICIPATION AND SEMINAR TALKS

University of Freiburg (2023), TU Wien (2023, Vienna), EDHEC (2023, Nice), York University (2023, Toronto, online), Copenhagen Business School (2022), Erasmus University (2022, Rotterdam, online), 14th CFE-CMStatistics (2021, London, online), University of Freiburg (2021, online), CEBA Seminar (2021, St.Petersburg, online), IAAE Annual Conference (2021, Rotterdam, online), 13th SoFiE Annual Meeting (2021, San Diego, online), 13th CFE Conference (2019, London), Science Day (2019, University of Vienna), IAAE Annual Conference (2019, Nicosia), 12th SoFiE Annual Meeting (2019, Shanghai), 29th EC^2 Conference (2018, Rome), University of North Carolina (2018, Chapel Hill, NC), ISOR Colloquium (2018, Vienna), Financial Econometrics Conference (2018, Lancaster), 11th SoFiE Annual Meeting (2018, Lugano), University of Vienna (2017), Barcelona GSE Summer Forum (2015), Measuring and Modeling Financial Risk with High Frequency Data (2014, Florence)