

CURRICULUM VITAE

JOHANNES BRUMM

CONTACT INFORMATION

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ACADEMIC POSITIONS

since 2016 Full Professor, Chair of Macroeconomics
Institute of Economics (ECON), KARLSRUHE INSTITUTE OF TECHNOLOGY (KIT)
On parental leave for large parts of 2018 – 2020

2011 – 16 Senior Research Associate in Financial Economics,
Department of Banking and Finance, UNIVERSITY OF ZURICH

VISITING POSITIONS

2021 Department of Economics, HARVARD UNIVERSITY

2018 Department of Economics, BOSTON UNIVERSITY

EDUCATION

2011 Doctorate in Economics (Dr. rer. pol.), summa cum laude, UNIVERSITY OF MANNHEIM
Advisor: Tom Krebs

2010 Visiting Researcher, UNIVERSITY OF ZURICH (4 months)

2009 ENTER Exchange Student, STOCKHOLM SCHOOL OF ECONOMICS (6 months)

2007 Diploma in Mathematics (Dipl.-Math.), with Distinction, LMU MUNICH
Advisor: Damir Filipovic

2004 – 05 Exchange Student, BALLIOL COLLEGE, OXFORD UNIVERSITY (one academic year)

2003 Intermediate Diploma in Philosophy, LMU MUNICH

2001 – 07 Scholarships by STIFTUNG MAXIMILIANEUM and STUDIENSTIFTUNG DES DT. VOLKES

2000 A-levels (Abitur) at FRIEDRICH-KOENIG-GYMNASIUM WÜRZBURG, Grade: 1.0

RESEARCH FIELDS

Primary Macroeconomics, Computational Economics

Secondary Public Finance, Financial Economics, General Equilibrium Theory

JOURNAL PUBLICATIONS

- 2024 When Interest Rates Go Low, Should Public Debt Go High? (with Xiangyu Feng, Laurence Kotlikoff, and Felix Kubler), *AEJ: Macroeconomics*, Volume 16(4), 432-468, October 2024
- 2023 Re-use of Collateral: Leverage, Volatility, and Welfare (with Michael Grill, Felix Kubler, and Karl Schmedders), *Review of Economic Dynamics*, Volume 47, 19-46, January 2023
- 2022 Are Deficits Free? (with Xiangyu Feng, Laurence Kotlikoff, and Felix Kubler), *Journal of Public Economics*, Volume 208, 111-124, April 2022
- 2019 Global Value Chain Participation and Current Account Imbalances (with Georgios Georgiadis, Johannes Gräßl, and Fabian Trottner), *Journal of International Money and Finance*, Volume 97, 111-124, October 2019
- 2017 Using Adaptive Sparse Grids to Solve High-Dimensional Dynamic Models (with Simon Scheidegger), *Econometrica*, Volume 85(5), 1575-1612, September 2017
- Recursive Equilibria in Dynamic Economies with Stochastic Production (with Dominika Kryczka and Felix Kubler), *Econometrica*, Volume 85(5), 1467-1499, September 2017
- Reform Support in Times of Crisis: The Role of Family Ties (with Elias Brumm), *Economic Inquiry*, 55(3), 1416-1429, July 2017
- 2015 Scalable High-Dimensional Dynamic Stochastic Economic Modeling (with Dmitry Mikushin, Simon Scheidegger, and Olaf Schenk), *Journal of Computational Science*, 11, 12-25, November 2015
- Margin Regulation and Volatility (with Michael Grill, Felix Kubler, and Karl Schmedders), *Journal of Monetary Economics*, 75, 54-68, October 2015
- Collateral Requirements and Asset Prices (with Michael Grill, Felix Kubler, and Karl Schmedders), *International Economic Review*, 56(1), 1-25, February 2015
- 2014 Computing Equilibria in Dynamic Models with Occasionally Binding Constraints (with Michael Grill), *Journal of Economic Dynamics and Control*, 38, 142-160, January 2014

OTHER PUBLICATIONS

- 2022 Sparse Grids for Dynamic Economic Models (with Christopher Krause, Andreas Schaab, and Simon Scheidegger), *Oxford Research Encyclopedia of Economics and Finance*, November 2022
- 2020 Leveraging Posterity's Prosperity? (with Laurence Kotlikoff and Felix Kubler), *AEA Papers and Proceedings*, 110, 152-156, May 2020
- 2017 Computing Equilibria in Dynamic Stochastic Macro-Models with Heterogeneous Agents (with Felix Kubler and Simon Scheidegger), *Advances in Economics and Econometrics: Theory and Applications (Eleventh World Congress)*, November 2017

WORKING PAPERS & WORK IN PROGRESS

- Active WPs* Public Debt in Calibrated OLG Models: Fiscal Arithmetic versus Welfare Analysis (with Jakob Hußmann)

- The Global Life-Cycle Optimizer – Analyzing Fiscal Policy’s Potential to Dramatically Distort Labor Supply and Saving (with Laurence Kotlikoff and Christopher Krause)
- In Progress* Sovereign Debt Dynamics in the Euro-Zone: The Differential Impact of a Common Currency (with Luca Pegorari)
- Tensor-Train Decomposition for High-Dimensional Economic Models (with Jakob Hußmann)
- Shape-Preserving Neural-Net Projection (with Lukas Frank, and Simon Scheidegger)
- Optimal Debt to GDP: A Quantitative Theory (with Jakob Hußmann)

LECTURES

- Undergraduate* The Digital Economy: Micro and Macro Perspective, KIT, 2024
 Computational Macroeconomics, KIT, 2024
 VWL II: Makroökonomie, lecture (approx. 500 students), KIT, 2017 & 2023
 Macroeconomic Theory, lecture, KIT, 2021/22 – 2024/25
- Graduate* Dynamic Macroeconomics, lecture, KIT, 2020/21 – 2024/25
 Advanced Topics in Economic Theory, KIT, 2017/18 & 2021 & 2022 & 2024
 Advanced Game Theory, KIT, 2016/17
 Macro-Finance, UNIVERSITY OF ZURICH, 2013 & 2014
- Postgraduate* Global Solution Methods for Macro, guest lecture at HARVARD UNIVERSITY, 2021
 Projection Methods, ZURICH INITIATIVE ON COMPUTATIONAL ECON., 2016 & 2017
 Recursive Methods, UNIVERSITY OF ZURICH, 2013
- Professional* Global Solution Methods, 4 one-week lectures, CENTRAL BANK OF COLOMBIA, 2014 – 17

PRESENTATIONS

- Conferences* Theories and Methods in Macroeconomics (T2M), Amsterdam, 2024; Mannheim Economics Alumni Symposium, 2023; Society for Economic Dynamics (SED), Minneapolis, 2021; Econometric Society and Bocconi University Virtual World Congress (ESWC), 2020; Computing in Economics and Finance (CEF), Ottawa, 2019; Standing Field Committee of the Verein für Socialpolitik, Berlin, 2019; Econometric Society European Meeting (ESEM), Geneva, 2016; Dynare Conference, Brussels, 2015; European Economic Association (EEA), Mannheim, 2015; Econometric Society World Congress (ESWC), Montreal, 2015; ESEM, Toulouse, 2014; Stanford Institute for Theoretical Economics (SITE), Stanford, 2014; Society for the Advancement of Economic Theory (SAET), Paris, 2013; CEF, Vancouver, 2013; SED, Seoul, 2013; Quantitative Society for Pensions and Saving (QSPS), Utah State University, 2013; Cologne Workshop on Macroeconomics, University of Cologne, 2012; ESEM, Malaga, 2012; EEA, Malaga, 2012; European Finance Association (EFA), Copenhagen, 2012; SED, Cyprus, 2012; SAET, Faro, 2011; ESWC, Shanghai, 2010; CEF, London, 2010; SAET, Ischia, 2009
- Seminars* University of Luxembourg, 2024; CERGE-EI Prague, 2023; University of Zurich, 2023; University of Würzburg, 2022; Goethe University Frankfurt, 2022; European Central Bank, 2021; International Monetary Fund, 2021; Boston University, 2018; University of Heidelberg,

2018; University of Bonn, 2016; Goethe University Frankfurt, 2016; Federal Reserve Bank of St. Louis, 2015; Karlsruhe Institute of Technology, 2015; University of Basel, 2015; University of Konstanz, 2015; University of Cologne, 2015; Paris School of Economics, 2014; University of St. Gallen, 2014; Goethe University Frankfurt, 2014; Oesterreichische Nationalbank, Vienna, 2012

Recent Discussions ECB Final Conference of the Research Task Force on Heterogeneity in Macroeconomics and Finance, Frankfurt, 2024; ECB-IMF-IMFER Conference: Global Challenges and Channels for Fiscal and Monetary Policy, Frankfurt, 2024

GRANTS

2022 - 27 ERC Starting Grant of approx. 1.5 Mio. Euro for the project SOLG for Policy
 2014 - 16 Two Grants of 9 Mio Core Hours each at the SWISS NATIONAL SUPERCOMPUTING CENTER
 2014 - 17 Grant from the BILATERAL ASSISTANCE AND CAPACITY BUILDING FOR CENTRAL BANKS PROGRAM at the GRADUATE INSTITUTE IN GENEVA for Teaching at the CENTRAL BANK OF COLOMBIA

PROFESSIONAL ACTIVITIES

Referee Econometrica, Economic Theory, European Journal of Political Economy, International Economic Review, Journal of Economic Growth, Journal of Economic Theory, Journal of Economic Dynamics and Control, Journal of Mathematical Economics, Operations Research, Quantitative Economics, Review of Economic Studies, Review of Financial Studies

February 14, 2025