# **CURRICULUM VITAE**

# JOHANNES BRUMM

## CONTACT INFORMATION

Secondary

	CONTACT INFORMATION
Address	Prof. Dr. Johannes Brumm, Chair of Macroeconomics Karlsruhe Institute of Technology (KIT), Institute of Economics (ECON) Waldhornstr. 27, D-76131 Karlsruhe
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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 (DiplMath.), 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

Public Finance, Financial Economics, General Equilibrium Theory

#### JOURNAL PUBLICATIONS

- When Interest Rates Go Low, Should Public Debt Go High? (with Xiangyu Feng, Laurence Kotlikoff, and Felix Kubler), forthcoming in *AEJ: Macroeconomics*
- 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
- Are Deficits Free? (with Xiangyu Feng, Laurence Kotlikoff, and Felix Kubler), *Journal of Public Economics*, Volume 208, 111-124, April 2022
- Global Value Chain Participation and Current Account Imbalances (with Georgios Georgiadis, Johannes Gräb, and Fabian Trottner), *Journal of International Money and Finance*, Volume 97, 111-124, October 2019
- 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
- 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
- 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

- Sparse Grids for Dynamic Economic Models (with Christopher Krause, Andreas Schaab, and Simon Scheidegger), *Oxford Research Encyclopedia of Economics and Finance*,

  November 2022
- 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)

#### **LECTURES**

Undergraduate 1

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

Graduate

Dynamic Macroeconomics, lecture, KIT, 2020/21 & 2021/22 & 2022/23 & 2023/24

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; German Economic Association: Committee for Economic Theory, 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, scheduled 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

Discussions

ECB-IMF-IMFER Conference: Global Challenges and Channels for Fiscal and Monetary Policy, Frankfurt, 2024; EABCN Conference: Asset Prices and the Macro Economy, Mannheim, 2016

#### 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

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

September 6, 2024