



# Prof. Melanie Krause, Ph.D.

*Curriculum Vitae, February 2023*

## Personal Information

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ORCID: 0000-0001-9299-2366  
Nationality: German  
Year of Birth: 1984  
Family: Partner, 1 Daughter (\*2012)

## Current Position

01/2023 - **University Professor of Sustainable Real Estate and Urban Development,**  
today *Leipzig University.*

## Previous Positions

04/2022 - **Visiting Professor ('Vertretungsprofessorin')** of Sustainable Real Estate and  
01/2023 **Urban Development,** *Leipzig University.*  
09/2015 - **Junior Professor of Macroeconomics,** *Hamburg University.*  
01/2023 Positive Midterm Evaluation ('Zwischenevaluation') in 08/2018  
08/2009- **Research Assistant,** *Johann-Wolfgang-Goethe Universität Frankfurt.*  
07/2015 At the Chair of International Macroeconomics & Macroeconometrics (Prof. Michael Binder, Ph.D.)

## Education

09/2008- **Ph.D. in Economics (Summa Cum Laude),** *Johann-Wolfgang-Goethe*  
12/2014 *Universität Frankfurt.*  
Structured Ph.D. Program with Fields: Econometrics, Macroeconomics  
Ph.D. Thesis: *Econometric Advances in the Analysis of Income Inequality Within and Between Countries*

- 09/2005- **Master of Science in Management (Distinction) and Diplôme de Grande**  
 09/2008 **Ecole (Félicitations du Jury)**, ESCP-EAP European School of Management,  
 London-Madrid-Paris.  
 Multinational program with double degree: 3 countries, 3 languages  
 Master's Thesis: *How Higher Moments Affect Portfolio Choice under Prospect Theory*
- 10/2003- **Vordiplom (Undergraduate Studies) in Economics with mark 1,4 ('excel-**  
 02/2005 **lent')**, Rheinische-Friedrich-Wilhelms-Universität Bonn.
- 08/1994- **Abitur (equivalent to A-Level) with mark 1,0 ('excellent')**, Städtisches Gym-  
 06/2003 *nasium Rheinbach.*

## Research

### Research Fields

- Urban and regional economics
- Economic development
- Income inequality

### Research Methods

- Data-driven empirical analysis
- Machine learning
  - Geo-spatial data

### Research Grants

- 09/2017- **German Research Foundation (DFG) Grant for *Shining (New) Light on Re-***  
 08/2020 ***gional Inequality, Convergence and Development.***  
 Principal investigator, jointly with Richard Bluhm and Christian Lessmann. Total project  
 funding for 3 years (2017-2020): 569,000 Euro (individual share: 185,200 Euro)

### Publications in Peer-Reviewed Journals

- 2023 The Emperor's Geography - City Locations, Nature and Institutional Optimization  
 (with Christian Düben), *Economic Journal*, Forthcoming
- 2022 Top Lights - Bright Cities and Their Contribution to Economic Development (with  
 Richard Bluhm), *Journal of Development Economics* 157, 2022, article 102880
- 2021 Air Pollution in an Urban World: A Global View on Density, Cities, and Emissions  
 (with David Castells-Quintana and Elisa Dienesch), *Ecological Economics* 189, 2021,  
 article 107153
- 2021 The Urbanising Force of Global Warming: The Role of Climate Change in the Spatial  
 Distribution of Population (with David Castells-Quintana und Tom McDermott),  
*Journal of Economic Geography* 21(4), 2021, pp.531-556
- 2021 Population, Light, and the Size Distribution of Cities (with Christian Düben), *Journal*  
*of Regional Science* 61(1), 2021, pp.189-211

- 2020 Rising Mean Incomes for Whom? (with Liang Frank Shao), *PlosOne* 15(12), 2020, e0242803
- 2019 Convergence vs. The Middle Income Trap: The Case of Global Soccer (with Stefan Szymanski), *Applied Economics* 51(27), 2019, pp.2980-2999
- 2017 The Millennium Peak in Club Convergence - A New Look at Distributional Changes in the Wealth of Nations, *Journal of Applied Econometrics* 32(3), 2017, pp.621-642
- 2014 Parametric Lorenz Curves and the Modality of the Income Density Function, *Review of Income and Wealth* 60(4), 2014, pp.905-929

### Working Papers

The Geographical Determinants of Within-City Heterogeneity in Urban Density (with André Seidel), *CESifo Working Paper* 8660

Regional Convergence at the County Level: The Role of Commuters (with Sebastian Kripfganz), *University of Exeter Economics Department Discussion Paper* 22/01

### Work in Progress

Headwind or Tailwind at the Ballot Box? - The Local Effect of Wind Turbines on Green Party Support (with Vincent Stegmaier)

Zero Waste Cities (with Jane Torbert)

### Smaller Notes

Corrigendum to "Elliptical Lorenz Curves" [J. Econom. 40 (1989) 327 - 338], *Journal of Econometrics* 174, 2013, p.44

## Presentations

### Conference Presentations

- 09/2019 **1st FDZ Ruhr Regional Disparity Workshop**, Essen, Germany
- 08/2019 **59th European Regional Science Congress**, Lyon, France
- 06/2019 **Urban Economics Conference**, Amsterdam, Netherlands
- 11/2018 **12th CESifo Workshop on Political Economy**, Dresden, Germany
- 09/2018 **Jahrestagung des Vereins für Socialpolitik**, Freiburg, Germany
- 08/2018 **58th European Regional Science Congress**, Cork, Ireland
- 05/2018 **Workshop on GeoData and Economics**, Braunschweig, Germany
- 05/2018 **Urban Economics Conference**, Düsseldorf, Germany
- 03/2018 **Royal Economic Society Conference**, University of Sussex, Brighton, UK
- 07/2017 **7th ECINEQ Meeting**, New York City, US
- 09/2016 **Jahrestagung des Vereins für Socialpolitik**, Augsburg, Germany
- 08/2016 **IARIW Conference**, Dresden, Germany
- 08/2016 **EEA-ESEM Congress**, Geneva, Switzerland
- 09/2015 **Jahrestagung des Vereins für Socialpolitik**, Münster, Germany

- 05/2015 **Spring Meeting of Young Economists**, Ghent, Belgium
- 06/2014 **1st Conference of the International Association of Applied Econometrics**, London, UK
- 04/2014 **Spring Meeting of Young Economists**, Vienna, Austria
- 12/2013 **24th (EC)<sup>2</sup> Conference - Econometric Analysis of Mixed Frequency Data**, Nicosia, Cyprus
- 09/2012 **Jahrestagung des Vereins für Socialpolitik**, Göttingen, Germany
- 03/2012 **International Atlantic Economic Society Conference**, Istanbul, Turkey
- 02/2012 **RGS Doctoral Conference in Economics**, Duisburg, Germany

#### Seminar Presentations

- 01/2023 **Free University Berlin**, Germany, Economics Research Seminar
- 11/2022 **Universidad Autónoma de Barcelona**, Spain, Economics Research Seminar
- 04/2021 **Ifo Institute Munich**, Germany, Digital Transformation and Innovation Seminar (online format)
- 09/2020 **German Institute for Global and Area Studies (GIGA) Hamburg**, Germany, Seminar in Socio-Economics (online format)
- 02/2020 **Rijksuniversiteit Groningen**, Netherlands, Research Seminar
- 11/2019 **Ruhr Universität Bochum**, Germany, Regional Economics Seminar
- 02/2019 **Helmut-Schmidt-University Hamburg**, Germany, Empirical Research Seminar
- 06/2018 **University of Cologne**, Germany, Econometrics Seminar
- 11/2017 **University of Hannover**, Germany, Brown Bag Seminar
- 08/2017 **Monash University Melbourne**, Australia, Development Economics Seminar
- 08/2017 **University of Queensland**, Brisbane, Australia, Economics Seminar
- 08/2017 **Griffith University Gold Coast**, Australia, Economics Seminar
- 06/2017 **WU Vienna**, Austria, Macroeconomics Seminar
- 03/2017 **University of Umeå**, Sweden, Economics Seminar
- 05/2016 **University of Kiel**, Germany, Econometrics Seminar
- 10/2015 **University of Hamburg**, Germany, Labour Economics Seminar
- 07/2014 **Goethe University Frankfurt**, Germany, Money and Macro Brown Bag Seminar
- 11/2013 **Goethe University Frankfurt**, Germany, Money and Macro Brown Bag Seminar
- 10/2011 **Goethe University Frankfurt**, Germany, Money and Macro Brown Bag Seminar

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#### Summer/ Winter Schools

- 01/2014 **9th Winter School on Inequality and Social Welfare Theory**, Alba di Canazei (Dolomites), organized by University of Verona, Italy
- 08/2013 **New Developments in Panel Methods Summer School** with lectures by Jeffrey M. Wooldridge, Mainz, Germany
- 06/2011 **The Jerusalem Summer School in Economic Growth**, Jerusalem, Israel

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## Conference Organization

05/2019 **Workshop on Geo Data in Economics, Hamburg, Germany.**

Local organizer of the two-day conference with keynote speakers David Weil (Brown University) and Maxim Pinkovskiy (Federal Reserve Bank New York)

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## Seminar Organization

### Hamburg University

#### **Research Seminar in Quantitative Economics.**

Co-Organization in the Winter Semester 2021/22 (hybrid format), Summer Semester 2021 (online format), Winter Semester 2020/21 (online format), Summer Semester 2020 (online format), Winter Semester 2019/20, Summer Semester 2019, Winter Semester 2018/19, Summer Semester 2018, Winter Semester 2017/18, Summer Semester 2017, Winter Semester 2016/17, Summer Semester 2016, Winter Semester 2015/16

#### **Doctoral Seminar in Economics.**

Organization in the Winter Semester 2021/22 (hybrid format), Summer Semester 2021 (online format), Winter Semester 2020/21 (online format), Summer Semester 2020 (online format), Winter Semester 2019/20, Summer Semester 2019, Winter Semester 2018/19, Summer Semester 2018, Winter Semester 2017/18, Summer Semester 2017. Co-Organization in the Winter Semester 2016/17, Summer Semester 2016

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## Teaching

### Leipzig University

#### **Lecturer of Socio-Economic Issues of Urban Development (Master's level).**

Winter Semester 2022/23

#### **Lecturer of Economic Growth, Income Distribution, Sustainability (Undergraduate level).**

Winter Semester 2022/23

#### **Lecturer of Big Data and Smart Cities (Master's level).**

Summer Semester 2022

#### **Lecturer of Introduction to Urban Economics (Undergraduate level).**

Summer Semester 2022

### Hamburg University

#### **Lecturer of Topics in Urban Economics (Master's level, seminar).**

Winter Semester 2021/22 (online format), Summer Semester 2020 (online format)

#### **Lecturer of Machine Learning Methods in Economics (Master's level).**

Winter Semester 2020/21 (online format)

#### **Lecturer of Applied Time Series and Panel Data Econometrics (Master's level).**

Winter Semester 2018/19, 2017/18, 2016/17

#### **Lecturer of Economic Growth and Income Distribution (Undergraduate level).**

Summer Semester 2019, 2018, Winter Semester 2016/17, 2015/16

**Lecturer of Long-Run Economic Development (Undergraduate level, seminar).**

Summer Semester 2020 (online format), 2016

**Lecturer of Applied Econometrics II (Undergraduate level).**

Summer Semester 2016

[Johann-Wolfgang-Goethe-Universität Frankfurt](#)

**Discussion session instructor of Macroeconomics I (Undergraduate level).**

Winter Semester 2014/15, 2013/14, 2012/13, Summer Semester 2012

**Teaching assistant of tutorial groups in Macroeconomics I (Undergraduate level).**

Winter Semester 2011/12, Summer Semester 2011, 2009

**Teaching assistant of the macroeconometrics course International Money and Finance (Master's level).**

Winter Semester 2010/11

**Pre-Semester course instructor of Real Analysis (Ph.D. and Research Master level).**

Winter Semester 2010/11

[Rheinische-Friedrich-Wilhelms-Universität Bonn](#)

**Teaching Assistant of Production Theory (Undergraduate level).**

Winter Semester 2004/05

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## Thesis Supervision

[Ph.D. Thesis Supervision \(Leipzig University\)](#)

Ongoing Vincent Stegmaier, Jane Torbert

[Ph.D. Thesis Supervision \(Hamburg University\)](#)

Ongoing Christian Düben

[Master's Thesis Supervision \(Hamburg University\)](#)

2022 Svetlana Prokhorchik

2021 Narek Mirzoyan, Bohdan Kostiv, Alejandro Parra Cárdenas, Avery Wehner, Elena Storti, Oxana Iakovleva

2020 Oyinkansola Osunkoya, Anahit Kirakosyan

2019 Bora Lee, Mitchel Graves, Zhexin Zhang, Selcuk Kirbas

2018 Eva Cordts, Yagmur Kurtoglu

2017 Mengchao Zhang, Adeoye Oyekan, Yan Stegert, Claudia Hernández

2016 Logan Carlson

## Bachelor Thesis Supervision (Hamburg University)

- 2022 Gunay Abidinova, Ashwin Fernandes, Alina Westphal
- 2021 Fawad Ahmad Bajwa, Salome Last
- 2020 Felix Kintrup, Elisa Stumpf, Benedikt Kretzler, Felicitas Bichowski, Helena Blumenschein, Louisa Kirsten, Kyari Yahaya, Robin Denker
- 2019 David Andjelkovic, Lennart Dühren, Phuong Duy Ha, Andrés Grabau, Jude-Ismael Ladouceur, Hoshang Hussainy, Jiaxi Chen
- 2018 Clemens Lehner, Nina Morgenstern, Steven Schlicker, Cheng Huo, Malte Christophersen, Nadine Scherer
- 2017 Steven Ficht, Alexander Weis, Raphael Layer, Nadjim Sarwary, Arber Mehmeti, Christina Preuße, Niklas Pätzold, Frederik Moorkamp
- 2016 Tim Wunderlich, Eugen Bill, Tina-Marie Jung, Moritz Lamparter, Olesja Ischanow

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## Refereeing

### Research Funds and Funding Institutions

*Sveriges Riksbankens Jubileumsfond, Mercator Research Center Ruhr*

### Academic Journals

*Economic Journal, American Economic Review: Insights, Review of Income and Wealth, Journal of Economic Inequality, Remote Sensing, Journal of Urban Affairs, World Development, Oxford Bulletin of Economics and Statistics, Canadian Journal of Economics, Review of International Organizations, Applied Economics, Finanzarchiv, Statistica Neerlandica, Economies, Sustainability*

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## Awards

- 11/2018 **Nachhaltigkeits-Patin for the Sustainable Development Goal “Decreasing Inequalities” by Hamburg University.**  
Official recognition by the university president and 5000 euro funding for sustainability-related projects
- 08/2014 **Invitation to Participate in the 5th Lindau Nobel Laureate Meeting as Young Economist.**
- 12/2008 **Premier Prix du Mémoire de Recherche.**  
Prize for the best master’s thesis of the year (2000 Euro), awarded by Fondation ESCP-EAP

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## Machine Learning Course Certificates

- 02/2021 - **Natural Language Processing Specialization, DeepLearning.AI via Coursera.**
- 06/2021 Course 4: Natural Language Processing with Attention Models  
Course 3: Natural Language Processing with Sequence Models  
Course 2: Natural Language Processing with Probabilistic Models  
Course 1: Natural Language Processing with Classification and Vector Spaces

## IT Skills

Programming	Python, incl. SciPy, NumPy, Pandas, scikit-learn, TensorFlow, Trax	<i>Very good</i>
	STATA, inkl. Mata in STATA	<i>Very good</i>
	Matlab	<i>Advanced</i>
	R	<i>Basic</i>
Geo-Data	QGIS	<i>Good</i>
Tables	Excel	<i>Very good</i>
Editor	L <sup>A</sup> T <sub>E</sub> X	<i>Very good</i>
Data Bases	SQL	<i>Basic</i>

## Language Skills

German	<i>Mother Tongue</i>
English	<i>Fluent (written and spoken)</i>
Spanish	<i>Fluent (written and spoken)</i>
French	<i>Fluent (written and spoken)</i>
Norwegian	<i>Fluent (written and spoken)</i>