CARL-CHRISTIAN GROH

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Employment

University of Bonn 2023-
Postdoctoral researcher

Education

University of Mannheim 2017-2023
Ph.D. in Economics

Yale University 2021-2022
Visiting Ph.D. student

Ludwig-Maximilians University Munich 2011-2016
B.Sc. and M.Sc. in Economics

Research Fields

Microeconomic Theory, Industrial Organization, Economics of AI

References

Prof. Benny Moldovanu
University of Bonn
mold@uni-bonn.de

Prof. Stephan Lauermann
University of Bonn
s.lauermann@uni-bonn.de

Prof. Francesco Decarolis
Bocconi University
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Prof. Volker Nocke
University of Mannheim
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Published and Accepted Papers

Tracking, Price Discrimination, and Disclosure in Sequential Search Markets, accepted at *RAND Journal of Economics*, with Marcel Preuss

Competitive Price Discrimination, Imperfect Information, and Consumer Search, *Journal of Economic Theory*, 2026

Market Design for Personal Data, *Yale Journal on Regulation*, 2023, with Dirk Bergemann, Jacques Crémer, David Dinielli, Paul Heidhues, Maximilian Schäfer, Monika Schnitzer, Fiona Scott Morton, Katja Seim, and Michael Sullivan

Job Market Paper

Pricing Intelligence: Task-Based Learning and Labor Displacement in the AI Economy

What determines the speed of AI-driven labor displacement? I study this question in a microeconomic model in which users choose between labor and AI to complete tasks. AI models improve through task-specific learning from deployment. Profit-maximizing AI providers price tasks where labor has a strong comparative advantage out of automation to extract more revenue from other tasks, which decelerates total AI adoption by preventing AI learning on the excluded tasks. I characterize when this tension gives rise to an accelerating path of AI adoption or a learning trap in which adoption remains persistently low. Competition shifts AI deployment and learning toward tasks where AI has a comparative disadvantage and, if it is sufficiently intense, accelerates AI adoption. Asymmetric competition can further accelerate AI adoption by inducing providers to specialize. Importantly, even temporary regulatory interventions such as constraints on providers' compute capacities can keep AI adoption persistently low.

Working Papers

Price Discrimination in Search Markets: The Role of Consumer Awareness, with Jonas von Wangenheim, *Revise and Resubmit at AEJ: Microeconomics*

When Competition Needs Awareness: Regulating Social Media with Naive Users, with Martino Banchio, Francesco Decarolis, Miguel Risco, and Rafael Jiménez-Durán

Business Cycles in the Data Economy, with Oliver Pfäuti and Farzad Saidi

Search, Data, and Market Power

Big Data and Inequality

Scholarships and Awards

Best Reviewers Award of IJIO 2026

Centre for Competition Economics Prize for Young Researchers 2025

CDSE Teaching Award 2021
University of Mannheim

CDSE Teaching Award 2019
University of Mannheim

Research Prize for Excellent Students 2014
Ludwig-Maximilians University Munich

Bayerische Eliteakademie Scholarship 2013-2014
Bavarian Elite Academy

Teaching Experience

Auctions and Markets — Fall/Winter 2025
Bachelor lecture, University of Bonn — Fall/Winter 2024

Microeconomics A — Spring/Summer 2025
Bachelor tutorial, University of Bonn

Information Economics — Spring/Summer 2024
Bachelor lecture, University of Bonn

Advanced Macroeconomics III — Spring/Summer 2023
Ph.D. tutorial, University of Mannheim — Spring/Summer 2020
Spring/Summer 2019

Economic Policy — Spring/Summer 2021
Bachelor tutorial, University of Mannheim

Microeconomics A — Spring/Summer 2023
Bachelor tutorial, University of Mannheim — Spring/Summer 2019

Presentations

2026: EEA-ESEM congress · EARIE conference · CRC TR 224 fall retreat · Mannheim Digital Markets Workshop · University of Vienna

2025: UK Competition and Markets Authority · CCE conference · Bocconi · IIOC · Oligo Workshop · SAET · University of Berlin

2024: ASSA annual meeting · MaCCI annual conference · Paris Conference on Digital Economics · IIOC · SED meeting · EARIE conference · Theory & Policy in the Digital Economy

2023: University of Verona · MaCCI annual conference · Search-and-Matching Workshop 2023 · IIOC · Munich Summer Institute · NASM · Stony Brook Conference On Game Theory · EEA-ESEM congress · EARIE conference · VfS annual conference · EU Directorate-General for Competition · BCDMN IO Theory conference · European Winter Meeting of the Econometric Society

2022: Yale University · ENTER Jamboree · CLEEN conference · EEA-ESEM congress · EARIE conference · CRC TR 224 fall retreat · European Winter Meeting of the Econometric Society

Refereeing

American Economic Journal: Microeconomics, American Economic Review: Insights, International Journal of Industrial Organization, Journal of Economic Theory, Journal of Mathematical Economics, RAND Journal of Economics, Review of Industrial Organization

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