

Arkady Konovalov

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Academic Employment

- 2022- Associate Professor, School of Psychology, Centre for Human Brain Health (CHBH), University of Birmingham
- 2017-2022 Postdoctoral Fellow, Zurich Center for Neuroeconomics (ZNE), Department of Economics, University of Zurich
- 2010-2012 Research Fellow, Center for Economic Theory, Institute of Economics, Russian Academy of Sciences – Ural Branch
- 2009-2012 Lecturer, Ural State University

Education

- 2017 Ph.D. in Economics, The Ohio State University
- 2013 Master of Arts in Economics, The Ohio State University
- 2009 Candidate of Sciences in Economics, Institute of Economics, Russian Academy of Sciences – Ural Branch (M.Sc. equivalent)
- 2005 Diploma in Management, Ural State University (B.A. equivalent)

Preprints and Working Papers

1. Buergi, N.*, Aydogan, G.*, Konovalov, A., & Ruff, C.C. (2024). A Neural Fingerprint of Adaptive Mentalization. (*revise & resubmit at Nature Neuroscience*)
2. Konovalov, A. (2024). Ten Tips for Running Behavioral Experiments Using Human Participants. (*in revision*)
3. Buergi, N., Konovalov, A., Biegel, C., Villar de Araujo, T., Aydogan, G., & Ruff, C.C. (2024). Neurocomputational Signatures of Altered Adaptive Mentalization in Autism. (*in revision*)
4. Lugin, C.*, Konovalov, A.*, & Ruff, C.C. (2024). Salience-Based Information Integration: An Overarching Function of the “Social Brain”? (*in revision*)
5. Konovalov, A., Hu, J., & Ruff, C.C. (2024). Neural Dynamics Underlying Strategic Social Decisions. (*to be submitted*)
6. Bedi, S., Casimiro, E., Konovalov, A., De Hollander, G., Helmchen, F., Brem, S., Ruff, C.C. (2024). Separable Neurocomputational Mechanisms Underlying Multisensory Learning. (*to be submitted*)
7. Konovalov, A., Luzyanin, D., Popov, S. (2024). Unrewarded Cooperation. (*submitted*).

Book Chapters

1. Konovalov, A. (2024). Neural Mechanisms of Strategic Decision Making. (*forthcoming in Neuroeconomics: Core Topics and Current Directions, Springer Nature*).

Refereed Publications

1. Lugin, C.*, Konovalov, A.*, & Ruff, C.C. (2025). Facilitating Cooperation by Manipulating Attention. *Communications Psychology*, 3, 39.
2. Bavard, S., Stuchlý, E., Konovalov, A., & Gluth, S. (2024). Beyond Choices: Humans Can Infer Social Preferences from Response Times Alone. *PLOS Biology*, 22(6): e3002686.
3. Bergmann, U. & Konovalov, A. (2024). Auction Design and Order of Sale with Budget-Constrained Bidders. *Experimental Economics*, 27, 36-57.
4. Konovalov, A., & Krajbich, I. (2023). Decision Times Reveal Private Information in Strategic Settings: Evidence from Bargaining Experiments. *The Economic Journal*, 133(656), 3007-3033.

5. Hu, J., Konovalov, A., & Ruff, C.C. (2023). A Unified Neural Account of Contextual and Individual Differences in Altruism. *eLife* 12:e80667.
6. Konovalov, A. & Ruff, C.C. (2022). Enhancing Models of Social and Strategic Decision Making with Process Tracing and Neural Data. *WIREs Cognitive Science*, 13:e1559.
7. Konovalov, A.*, Hill, C.*, Daunizeau, J., & Ruff, C.C. (2021). Dissecting the Functional Contributions of the Social Brain to Strategic Behavior. *Neuron*, 109, 3323–333.
8. Konovalov, A. & Krajbich, I. (2020). Mouse Tracking Reveals Structure Knowledge in the Absence of Model-Based Choice. *Nature Communications*, 11.
9. Konovalov, A. & Krajbich, I. (2019). Revealed Strength of Preference: Inference from Response Times. *Judgement and Decision Making*, 14(4), 381-394.
10. Konovalov, A. & Krajbich, I. (2019). A Decade of Neuroeconomics: What Have We Learned? *Organizational Research Methods*, 22(1), 148-173.
11. Konovalov, A. & Krajbich, I. (2018). Neurocomputational Dynamics of Sequence Learning. *Neuron*, 98(6), 1282-1293.
12. Konovalov, A.*, Hu, J.*, & Ruff, C.* (2018). Neurocomputational Approaches to Social Behavior. *Current Opinion in Psychology*, 24, 41-47.
13. Konovalov, A. & Krajbich, I. (2016). Gaze Data Reveal Distinct Choice Processes Underlying Model-Based and Model-Free Reinforcement Learning. *Nature Communications*, 7.

Non-Refereed Publications

1. Konovalov, A. & Krajbich, I. (2017). Money in the Bank: Distortive Effects of Accumulated Earnings on Risky Choice. *Neuron*, 93(3).

* Equal contribution

Research in Progress

1. Neurocomputational underpinnings of cooperation (as the first author, with Claire Lugrin and Christian Ruff).
2. Older adults make less use of theory of mind in strategic interactions (as the first author, with Patricia Lockwood, Christian Ruff, et al.)
3. Computational modeling of simple planning behavior (as PI, with Daniil Luzyanin).
4. Bottom-up and top-down attention in value-based choice (as PI, with Blair Shevlin, Daniil Luzyanin, and Clayton Hickey).

Grants

Co-investigator

2023-2024 SCAS Crime Linkage Tool (£850,000 ~ \$1,120,000)

Co-organizer

2023-2028 ESRC Centre for National Training and Research Excellence in Understanding Behaviour (CENTRE-UB), (£7,000,000 ~ \$9,250,000)

PhD and postdoc

2019 Swiss Academy of Humanities and Social Sciences travel grant (1000 CHF ~ \$1185)
 2017 Journal of Money, Credit and Banking travel grant
 2016 Journal of Money, Credit and Banking travel grant
 2015 Journal of Money, Credit and Banking research grant (\$3000)
 2015 Journal of Money, Credit and Banking travel grant
 2015 Shanghai Neuroeconomics Collective Summer School tuition grant (\$1000)
 2014 OSU Behavioral Decision Making research grant (\$1900)
 2011 Conference travel grant for junior researchers, Russian Academy of Sciences
 2010 Research grant for junior researchers, Russian Academy of Sciences

Awards

- 2016 CCBBI Student Neuroimaging Research Award (\$2250)
- 2011 Best Presentation Award, Russian Summer School in Institutional Analysis

Fellowships

- 2016 Journal of Money, Credit and Banking Dissertation Fellowship
- 2012 The Ohio State University Graduate Fellowship
- 2000 Ural State University Fellowship (2000-2005)

Invited Talks

- 2025 Boston University, Department of Psychological and Brain Sciences
- 2024 Cooperation Colloquia (online)
- 2024 University of Birmingham, Computational Social Cognition Summer School
- 2024 MindRL Hub (online)
- 2022 University of Nottingham, CRIBS Seminar Series
- 2020 University of Konstanz, Department of Economics (online)
- 2020 McGill University, Otto Lab (online)
- 2020 The Ohio State University, Department of Psychology (online)
- 2020 University of Warwick, DRAW Seminar Series (online)
- 2018 University of Basel, Department of Psychology

Conference Presentations

- 2024 Society for Neuroeconomics – Annual Meeting (poster)
- 2024 Cognitive Computational Neuroscience (CCN) (poster)
- 2024 International Conference on Social Dilemmas (ICSD) (talk)
- 2023 Cognitive Computational Neuroscience (CCN) (poster)
- 2022 Society for Neuroeconomics – Annual Meeting (poster)
- 2021 Interdisciplinary Symposium on Decision Neuroscience (ISDN) (online talk)
- 2021 Neuropsychoeconomics – Annual Meeting (online talk)
- 2021 Maastricht Behavioral and Experimental Economics Symposium (online talk)
- 2020 Society for Neuroeconomics – Annual Meeting (online poster)
- 2019 Society for Neuroeconomics – Annual Meeting (poster)
- 2019 Reinforcement Learning and Decision Making (RLDM) (poster)
- 2018 Society for Neuroeconomics – Annual Meeting (poster)
- 2018 Neuropsychoeconomics – Annual Meeting (talk)
- 2018 Eighth Symposium on Biology of Decision Making (SBDM) (poster)
- 2018 FENS Spring Brain Conference: Comp. Neuro. of Prediction (poster spotlight)
- 2017 Society for Neuroeconomics – Annual Meeting (poster)
- 2017 Reinforcement Learning and Decision Making (RLDM) (talk)
- 2017 Interdisciplinary Symposium on Decision Neuroscience (ISDN) (poster)
- 2016 Economic Science Association – North American Meeting (talk)
- 2016 Society for Neuroeconomics – Annual Meeting (poster)
- 2015 Economic Science Association – North American Meeting (talk)
- 2015 Society for Judgment and Decision Making – Annual Conference (poster)
- 2015 Society for Neuroeconomics – Annual Meeting (poster)
- 2014 Society for Neuroeconomics – Annual Meeting (poster)
- 2011 Game Theory and Management. Graduate School of Management, Saint-Petersburg State University, Russia (talk)

Workshop Participation

- 2023 UoB School of Psychology Research and Impact Event (talk)
- 2019 Sloan-Nomis Workshop on Cognitive Foundations of Economic Behavior (talk)
- 2018 Summer School on Cognitive Foundations of Economic Behavior

2017	OSU Decision Sciences Collaborative Research Forum (poster)
2015	OSU Center for Cognitive and Brain Sciences Fall Retreat (talk)
2015	Shanghai Neuroeconomics Collective Summer School (poster)
2014	OSU Center for Cognitive and Brain Sciences Fall Retreat (poster)
2011	Russian Summer School in Institutional Analysis (talk)
2010	European School in New Institutional Economics (ESNIE) (talk)
2010	Russian Summer School in Institutional Analysis (talk)

Teaching

University of Birmingham

2023-2024	Research Methods in Psychology (undergraduate)
2022-2024	Neuroscience and Society (undergraduate)

The Ohio State University

2013	Principles of Macroeconomics (undergraduate), Teaching Assistant
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Ural State University

2012	Statistics (undergraduate)
2012	Introduction to Economics (undergraduate)
2011	Managerial Economics (graduate)
2011	Economics of Information (graduate)
2010	Game Theory (undergraduate)
2010	Microeconomics (undergraduate)

Advising

Undergraduate thesis advisor

2024-2025	Yona Taub, Ben Hastings, Ruby Renner-Gomez, Maisie Ablewhite, Larissa Swinford, Maria Salam, Joe Hubbard, Simran Khera (BSc Psychology, University of Birmingham)
2023-2024	Anja Wright, Ella Pomerance, Lauren Walsh, <u>Sophiya Syed (BSc Programmes LH Project Prize 2024)</u> , Momina Amer, Haoda Teng, Roxanne Tamang, Abbey Brunt (BSc Psychology, University of Birmingham)

Master's thesis advisor

2024-2025	Wenjie Song, Wenqing Zhang, Vivienne Fry (M.Sc. Psychology, University of Birmingham)
2023-2024	Yinqi Zhang (M.Sc. Computational Neuroscience and Cognitive Robotics, University of Birmingham)

PhD external examiner

2023	Ralitsa Kostova (University of Glasgow)
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PhD secondary supervisor

2024-	Janine Pfirrmann (School of Psychology, University of Birmingham)
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PhD committee member

2024-	Aju Ani Justus (School of Computer Science, University of Birmingham)
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Other Professional Experience

2014-2017	Research Assistant to Professor Ian Krajbich
2007-2009	Reporter, Editor, Expert-Ural Business Journal (Russia)

Ad Hoc Reviewing

Grants

AMS Springboard Award, French National Research Agency (ANR), Israel Science Foundation (ISF), US National Science Foundation (NSF), UKRI Economic and Social Research Council (ESRC), UKRI Future Leaders Fellowship (FLF), UKRI Medical Research Council (MRC)

General interest journals

eLife, Nature Human Behaviour, npj Science of Learning, Open Mind, PLOS ONE, Science Advances, Scientific Reports, Social Science & Medicine

Economics journals

Econometrica, Experimental Economics, Journal of Economic Behavior and Organization, Journal of Economic Psychology, Journal of Economic Science Association

Neuroscience journals

Journal of Cognitive Neuroscience, Journal of Neurophysiology, Journal of Neuroscience, Neuroimage, PLOS Biology, PLOS Computational Biology, Social Neuroscience, Social Cognitive and Affective Neuroscience

Psychology journals

Cognitive Psychology, Communications Psychology, JEP: General, Journal of Mathematical Psychology

Service

Positions

2023-	Digital Harms and Good Theme Lead, Centre for National Training and Research Excellence in Understanding Behaviour (CENTRE-UB)
2023-	Web and Communications Officer, School of Psychology, University of Birmingham
2022-2023	Deputy Assessment Officer, School of Psychology, University of Birmingham

Ad hoc

2024	Program Committee for Society for Neuroeconomics Annual Meeting
2024	Organization Committee for Computational Social Cognition Summer School (University of Birmingham)
2023	Program Committee for Society for Neuroeconomics Annual Meeting
2022	Programme Committee for European Economic Association Annual Congress
2018-2019	Neuroeconomics Seminar, University of Zurich (organization)

Lab Members

Postdoc

2024-	Jiaxin Yu
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Past

Research assistant

2023-2024	Daniil Luzyanin (PhD student at the University of Reading)
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Visiting undergraduate student

2024	Janice Zhong (PhD student at Virginia Tech)
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