

JONATHAN C S NEWTON

PROFESSOR OF ECONOMICS



About me

As Professor of Economics at Kyoto University, I have worked on evolutionary game theory, conventions, shared intentions, bargaining and contagion.

Personal

Jonathan Newton
ニュートン ジョナサン
Nationality: UK

Areas of specialization

Evolutionary game theory
Collaboration · Conventions
Social learning · Networks

Interests

Global affairs, debate,
outdoors, hiking, trail running,
gym training, coffee, whisky,
writing & reading.

Software

LaTeX / MS Office
Mathematica / MatLab

@ jcsnewton@gmail.com

🏠 Personal webpage

🎓 University webpage

🌐 LinkedIn

PROFESSIONAL EXPERIENCE

- 2018– **Kyoto University, Institute of Economic Research**
PROFESSOR · Kyoto, Japan 📍
Specialist in microeconomics and game theory, the theory of strategic interactions. Global leader in the use of evolutionary game theory in economics. Associate Prof. 2018-21.
- 2011–2017 **University of Sydney, School of Economics**
LECTURER/RESEARCH AFFILIATE · Sydney, Australia 📍
Acclaimed early career researcher, publishing in top international economics journals.
- 2009–2011 **University of Cambridge, St. Edmund's College**
FELLOW AND DIRECTOR OF UNDERGRADUATE STUDIES · Cambridge, UK 📍
Responsible for arranging the college education of undergraduate students via small group tutorials, complementing lectures at the departmental level.
- 2008–2011 **University of Cambridge, Downing College**
BYE-FELLOW · Cambridge, UK 📍
Responsible for carrying out college tutorials and interviewing students for entry to the Cambridge undergraduate degree.
- 2004–2005 **Deloitte & Touche LLP**
AUDITOR · London, UK 📍
Member of teams auditing companies out of London. Passed first year accountancy exams before seeking new challenges and going to graduate school.

DEGREES

- 2011 **University of Cambridge**
PH.D. · Economics 🏛️
- 2006 **Birkbeck College London**
M.Sc. · Economics 🏛️
Grade: Distinction
- 2004 **University College London**
B.Sc. · Mathematics 🏛️
Grade: 1st Class

GRANTS

- 2021-24 **JSPS, Japan**
KAKENHI B · Evolution, misspecification and equilibrium
JPY 10,270,000
- 2013-15 **ARC, Australia**
DECRA · Bank regulation: the implications of interconnectedness and adaptive behaviour
AUD 368,777

LANGUAGES

English	mother tongue
Japanese	● ● ● ●
French	● ● ● ●

PROFESSIONAL SERVICE

- 2024– **Econometric Society**
MEMBER OF ASIAN REGIONAL
STANDING COMMITTEE
- 2022– **International Journal of Game Theory**
ASSOCIATE EDITOR

PUBLICATIONS

Over 27 publications in prestigious international economic journals. See full list below.

TALKS

Over 50 invited talks across four continents, including as a main speaker at LEG2022 and Brisbane Evolution Winter School 2023. Map available here.

PUBLICATION LIST

🕒	Title 📝	Journal 📖	Coauthors 👥
2022	Deep and shallow thinking in the long run	· THEORETICAL ECONOMICS	· Heinrich Nax
2022	Stochastic dynamics and Edmonds' algorithm	· JOURNAL OF DYNAMICS AND GAMES	· William Sandholm
2021	Geographic diversity in economic publishing	· JOURNAL OF ECONOMIC BEHAVIOR & ORGANIZATION	· Simon Angus, Kadir Atalay, David Ubilava
2021	Corrigendum to maximality in the farsighted stable set	· ECONOMETRICA	·
2021	Conventions under heterogeneous behavioral rules	· REVIEW OF ECONOMIC STUDIES	·
2020	When does ambiguity fade away?	· ECONOMICS LETTERS	· Filippo Massari
2020	Evolution and Rawlsian social choice in matching	· GAMES & ECONOMIC BEHAVIOR	· Ennio Bilancini, Leonardo Boncinelli
2020	Collaboration leads to cooperation on sparse networks	· PLOS – COMPUTATIONAL BIOLOGY	· Simon Angus
2020	Agency, potential and contagion	· GAMES & ECONOMIC BEHAVIOR	· Damian Sercombe
2019	Watercooler chat, organizational structure and corporate culture	· GAMES & ECONOMIC BEHAVIOR	· Andrew Wait, Simon Angus
2019	Risk attitudes and risk dominance in the long run	· GAMES & ECONOMIC BEHAVIOR	· Heinrich Nax
2019	Agency Equilibrium	· GAMES	·
2018	Evolutionary game theory: a renaissance	· GAMES	·
2018	Conventional contracts, intentional behavior and logit choice: equality without symmetry	· GAMES & ECONOMIC BEHAVIOR	· Sung-Ha Hwang, Wooyoung Lim, Philip Neary
2017	Heterogeneity in preferences and behavior in threshold models	· JOURNAL OF MECHANISM & INSTITUTION DESIGN	· Philip Neary
2017	Shared intentions: the evolution of collaboration	· GAMES & ECONOMIC BEHAVIOR	·
2017	The preferences of Homo Moralis are unstable under evolving assortativity	· INTERNATIONAL JOURNAL OF GAME THEORY	·
2017	Payoff dependent dynamics and coordination games	· ECONOMIC THEORY	· Sung-Ha Hwang
2016	Stochastic stability in assignment problems	· JOURNAL OF MATHEMATICAL ECONOMICS	· Bettina Klaus
2015	Emergence of shared intentionality is coupled to the advance of cumulative culture	· PLOS – COMPUTATIONAL BIOLOGY	· Simon Angus
2015	Stochastic stability on general state spaces	· JOURNAL OF MATHEMATICAL ECONOMICS	·
2015	Is it a norm to favour your own group	· EXPERIMENTAL ECONOMICS	· Donna Harris, Benedikt Herrmann, Andreas Kontoleon
2015	Coalitions, tipping points and the speed of evolution	· JOURNAL OF ECONOMIC THEORY	· Simon Angus
2015	A one-shot deviation principle for stability in matching problems	· JOURNAL OF ECONOMIC THEORY	· Ryoji Sawa
2014	Cheap talk and editorial control	· BE JOURNAL OF THEORETICAL ECONOMICS	·
2012	Recontracting and stochastic stability	· JOURNAL OF ECONOMIC THEORY	·
2012	Coalitional stochastic stability	· GAMES & ECONOMIC BEHAVIOR	·

REVIEWS FOR AMERICAN MATHEMATICAL SOCIETY

Year	Title	Journal	Authors
2024	Hat guessing number for the class of planar graphs is at least 22	DISCRETE MATHEMATICS	Latyshev, Kokhas
2023	Best-response dynamics, playing sequences, and convergence to equilibrium in random games	INTERNATIONAL JOURNAL OF GAME THEORY	Heinrich, Jang, Mungo, Pangallo, Scott, Tarbush, Wiese
2023	Asymptotic welfare performance of Boston assignment algorithms	STOCHASTIC SYSTEMS	Pritchard, Wilson
2023	Hat guessing numbers of strongly degenerate graphs	SIAM JOURNAL OF DISCRETE MATHEMATICS	Knierim, Martinsson, Steiner
2023	Core stability of the Shapley value for cooperative games	SOCIAL CHOICE & WELFARE	Abe, Nakada
2023	Size-dependent minimum-effort games and constrained interactions	ECONOMICS LETTERS	Cui, Jiang, Shi
2023	Statistical inference in evolutionary dynamics	GAMES & ECONOMIC BEHAVIOR	Sawa, Wu
2022	Peg Solitaire on graphs with jumping and merging	INVOLVE	Beeler, Kilby
2022	Ordinal status games on networks	JOURNAL OF MATHEMATICAL ECONOMICS	Kukushkin
2022	Hat guessing on books and windmills	ELECTRONIC JOURNAL OF COMBINATORICS	He, Ido, Przybocki
2022	Games on signed graphs	AUTOMATICA	Li, Morse
2022	Speed limits	ECONOMICS LETTERS	Jelnov, Klunover
2022	Stability of strict equilibria in best experienced payoff dynamics: simple formulas and applications	JOURNAL OF ECONOMIC THEORY	Izquierdo, Izquierdo
2021	Pairwise stable matching in large economies	ECONOMETRICA	Greinecker, Kah
2021	Connector-breaker games on random boards	THE ELECTRONIC JOURNAL OF COMBINATORICS	Clemens, Kirsch, Mogge
2021	Maker-breaker percolation games II: escaping to infinity	JOURNAL OF COMBINATORIAL THEORY, SERIES B	Day, Falgas-Ravry
2021	A bargaining set for roommate problems	JOURNAL OF MATHEMATICAL ECONOMICS	Atay, Mauleon, Vannetelbosch
2021	Peg solitaire on Cartesian products of graphs	GRAPHS COMBIN.	Kreh, De Wiljes
2020	Game theoretical modelling of a dynamically evolving network II: target sequences of score	JOURNAL OF DYNAMICS & GAMES	Cannings, Broom
2020	Constrained stability in two-sided matching markets	SOCIAL CHOICE & WELFARE	Afacan, Dur
2020	Fashion game on graphs	DISCRETE OPTIMIZATION	Shen, Lin
2020	The hat guessing number of graphs	JOURNAL OF COMBINATORIAL THEORY, SERIES B	Alon, Ben-Eliezer, Shangguan, Tamo
2020	Cops and robbers on graphs of bounded diameter	SIAM JOURNAL OF DISCRETE MATHEMATICS	Hosseini, Knox, Mohar
2020	Convergence in games with continua of equilibria	JOURNAL OF MATHEMATICAL ECONOMICS	Bervoets, Faure
2019	Bounding the cop number of a graph by its genus	ACTA MATHEMATICA UNIVERSITATIS COMENIANAE	Bowder, Erde, Lehner, Pitz
2019	Maximality in the farsighted stable set	ECONOMETRICA	Ray, Vohra
2019	School choice under partial fairness	THEORETICAL ECONOMICS	Dur, Gitmez, Yilmaz
2019	Dynamic matching pennies on networks	INTERNATIONAL JOURNAL OF GAME THEORY	Cao, Qin, Yang, Zhang
2019	The core of roommate problems: size and rank fairness within matched pairs	INTERNATIONAL JOURNAL OF GAME THEORY	Jaramillo, Kayi, Klijn
2019	Sequential versus simultaneous assignment systems and two applications	ECONOMIC THEORY	Dur, Kesten
2019	The evolution of collaboration in symmetric 2x2-games with imperfect recognition of types	GAMES & ECONOMIC BEHAVIOR	Rusch
2019	Two problems in max-size popular matchings	ALGORITHMICA	Brandl, Kavitha
2019	A necessary and sufficient condition for uniqueness consistency in the stable marriage matching problem	ECONOMICS LETTERS	Karpov
2019	Stable matching in large economies	ECONOMETRICA	Che, Kim, Kojima
2018	Gaming the deferred acceptance when message spaces are restricted	MATHEMATICAL SOCIAL SCIENCES	Marutani
2018	Strategy-proofness of worker-optimal matching with continuously transferable utility	GAMES & ECONOMIC BEHAVIOR	Jagadeesan, Kominers, Rheingans-Yoo
2018	Finding a stable matching under type specific minimum quotas	JOURNAL OF ECONOMIC THEORY	Tomoeda
2018	Mutually best matches	MATHEMATICAL SOCIAL SCIENCES	Salonen, Salonen
2018	College admissions with entrance exams: centralized versus decentralized	JOURNAL OF ECONOMIC THEORY	Hafalir, Hakimov, Kubler, Kurino
2017	The spread of cooperative strategies on grids with random asynchronous updating	INTERNET MATH	Duffy, Janssen