

# JONATHAN NEWTON

## ECONOMIST & GAME THEORIST

### Current position:

Professor of Economics & Game Theory, Kyoto University.

### TEACHING & PROFESSIONAL

2021-	Professor, Institute of Economic Research, Kyoto University.
2018-21	Associate Prof., Institute of Economic Research, Kyoto Univ.
2016-17	Overseas Research Affiliate, School of Economics, University of Sydney.
2011-16	Lecturer, School of Economics, University of Sydney.
2009-11	Fellow & Director of Undergraduate Studies, St. Edmund's College, University of Cambridge.
2008-11	Bye-Fellow, Downing College, University of Cambridge.
2004-5	Auditor, Deloitte & Touche LLP

### RESEARCH INTERESTS

- > Evolutionary Game Theory
- > Coalitional Behaviour
- > Social Learning & Networks
- > Strategic Information Transmission

*The shared intentions agenda studies **collective agency and social structure**. See the project page at: [sharedintentions.net](http://sharedintentions.net)*

### EDUCATION

2011	PhD Economics, University of Cambridge
Thesis title	Essays on coalitional behaviour, social learning & strategic information transmission.
Advisor	Robert Evans
2006	MSc Economics, Birkbeck College London (Distinction)
2005	Part-Qualified Accountant, ACA
2004	BSc Mathematics, University College London (1 <sup>st</sup> class)

### CONTACT

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Kyoto University,  
Yoshida-honmachi,  
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Kyoto 606-8501  
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# JONATHAN NEWTON

## ECONOMIST & GAME THEORIST

### JOURNAL ARTICLES

1. [Coalitional Stochastic Stability](#), **Games & Economic Behavior** (2012).
2. [Recontracting and stochastic stability in cooperative games](#), **Journal of Economic Theory** (2012).
3. [Cheap talk and editorial control](#), **BE Journal of Theoretical Economics** (2014).
4. [A one-shot deviation principle for stability in matching problems](#), **Journal of Economic Theory** (2015), lead article. *Coauthored with Ryoji Sawa.*
5. [Coalitions, tipping points and the speed of evolution](#), **Journal of Economic Theory** (2015). *Coauthored with Simon Angus.*
6. [Is it a norm to favour your own group?](#), **Experimental Economics** (2015). *Coauthored with D.Harris, B.Herrmann, A.Kontoleon.*
7. [Stochastic stability on general state spaces](#), **Journal of Mathematical Economics** (2015).
8. [Emergence of shared intentionality is coupled to the advance of cumulative culture](#), **PLOS – Computational Biology** (2015). *Coauthored with Simon Angus.*
9. [Stochastic stability in assignment problems](#), **Journal of Mathematical Economics** (2016). *Coauthored with Bettina Klaus.*
10. [Payoff dependent dynamics and coordination games](#), **Economic Theory** (2017). *Coauthored with Sung-Ha Hwang.*
11. [The preferences of Homo Moralis are unstable under evolving assortativity](#), **International Journal of Game Theory** (2017).
12. [Shared intentions: the evolution of collaboration](#), **Games & Economic Behavior** (2017).
13. [Heterogeneity in preferences and behavior in threshold models](#), **Journal of Mechanism and Institution Design** (2017). *Coauthored with Philip Neary.*
14. [Conventional contracts, intentional behavior and logit choice: equality without symmetry](#), **Games & Economic Behavior** (2018). *Coauthored with Sung-Ha Hwang, Wooyoung Lim, Philip Neary.*
15. [Evolutionary game theory: a renaissance](#), **Games** (2018).
16. [Agency Equilibrium](#), **Games** (2019).
17. [Risk attitudes and risk dominance in the long run](#), **Games & Economic Behavior** (2019). *Coauthored with Heinrich Nax.*
18. [Watercooler chat, organizational structure and corporate culture](#), **Games & Economic Behavior** (2019). *Coauthored with Andrew Wait, Simon Angus.*

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### JOURNAL ARTICLES (CONTINUED)

19. [Agency, potential and contagion](#), **Games & Economic Behavior** (2020). *Coauthored with Damian Sercombe.*
20. [Collaboration leads to cooperation on sparse networks](#), **PLOS – Computational Biology** (2020). *Coauthored with Simon Angus.*
21. [Evolution and Rawlsian social choice in matching](#), **Games & Economic Behavior** (2020). *Coauthored with Ennio Bilancini, Leonardo Boncinelli.*
22. [When does ambiguity fade away?](#), **Economics Letters** (2020). *Coauthored with Filippo Massari.*
23. [Conventions under heterogeneous behavioural rules](#), **Review of Economic Studies** (2021). [Supplementary appendices.](#)
24. [Maximality in the farsighted stable set revisited](#), published as [Corrigendum to Maximality in the farsighted stable set](#), **Econometrica** (2021).
25. [Geographic diversity in economic publishing](#), **Journal of Economic Behavior & Organization** (2021). *Coauthored with Simon Angus, Kadir Atalay, David Ubilava.*
26. [Stochastic dynamics and Edmonds' algorithm](#), **Journal of Dynamics & Games** (2022). *Coauthored with William Sandholm.*
27. [Deep and shallow thinking in the long run](#), **Theoretical Economics** (2022). *Coauthored with Heinrich Nax.*

### REVIEWS FOR AMERICAN MATHEMATICAL SOCIETY

- [The spread of cooperative strategies on grids with random asynchronous updating](#), **Internet Math** (2017), Duffy & Jannsen.
- [College admissions with entrance exams: centralized versus decentralized](#), **Journal of Economic Theory** (2018), Hafalir, Hakimov, Kubler & Kurino.
- [Mutually best matches](#), **Mathematical Social Sciences** (2018), Salonen & Salonen.
- [Finding a stable matching under type specific minimum quotas](#), **Journal of Economic Theory** (2018), Tomoeda.
- [Strategy-proofness of worker-optimal matching with continuously transferable utility](#), **Games & Economic Behavior** (2018), Jagadeesan, Kominers & Rheingans-Yoo.
- [Gaming the deferred acceptance when message spaces are restricted](#), **Mathematical Social Sciences** (2018), Marutani.

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## ECONOMIST & GAME THEORIST

### REVIEWS FOR AMERICAN MATHEMATICAL SOCIETY (CONTINUED)

- [Stable matching in large economies](#), **Econometrica** (2019), Che, Kim & Kojima.
- [A necessary and sufficient condition for uniqueness consistency in the stable marriage matching problem](#), **Economics Letters** (2019), Karpov.
- [Two problems in max-size popular matchings](#), **Algorithmica** (2019), Brandl & Kavitha.
- [The evolution of collaboration in symmetric 2x2 games with imperfect recognition of types](#), **Games & Economic Behavior** (2019), Rusch.
- [The core of roommate problems: size and rank-fairness within matched pairs](#), **International Journal of Game Theory** (2019), Jaramillo, Kayı & Klijn.
- [Sequential versus simultaneous assignment systems and two applications](#), **Economic Theory** (2019), Dur & Kesten.
- [Dynamic matching pennies on networks](#), **International Journal of Game Theory** (2019), Cao, Qin, Yang & Zhang.
- [Bounding the cop number of a graph by its genus](#), **Acta Mathematica Universitatis Comenianae** (2019), Bowder, Erde, Lehner & Pitz.
- [Maximality in the farsighted stable set](#), **Econometrica** (2019), Ray & Vohra.
- [School choice under partial fairness](#), **Theoretical Economics** (2019), Dur, Gitmez & Yilmaz.
- [Convergence in games with continua of equilibria](#), **Journal of Mathematical Economics** (2020), Bervoets & Faure.
- [Cops and robbers on graphs of bounded diameter](#), **SIAM Journal of Discrete Mathematics** (2020), Hosseini, Knox & Mohar.
- [The hat guessing number of graphs](#), **Journal of Combinatorial Theory, Series B** (2020), Alon, Ben-Eliezer, Shangquan & Tamo.
- [Fashion game on graphs](#), **Discrete Optimization** (2020), Shen & Lin.
- [Constrained stability in two-sided matching markets](#), **Social Choice & Welfare** (2020), Afacan & Dur.
- [Game theoretical modelling of a dynamically evolving network II: target sequences of score](#), **Journal of Dynamics & Games** (2020), Cannings & Broom.
- [Peg solitaire on Cartesian products of graphs](#), **Graphs Combin.** (2021), Kreh & De Wiljes.
- [A bargaining set for roommate problems](#), **Journal of Mathematical Economics** (2021), Atay, Mauleon & Vannetelbosch.

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### REVIEWS FOR AMERICAN MATHEMATICAL SOCIETY (CONTINUED)

- [Maker-breaker percolation games II: escaping to infinity](#), **Journal of Combinatorial Theory, Series B** (2021), Day & Falgas-Ravry.
- [Connector-breaker games on random boards](#), **The Electronic Journal of Combinatorics** (2021), Clemens, Kirsch & Mogge.
- [Pairwise stable matching in large economies](#), **Econometrica** (2021), Greinecker & Kah.
- [Cautious farsighted stability in network formation games with streams of payoffs](#), **International Journal of Game Theory** (2021), Teteryatnikova.
- [Speed limits](#), **Economics Letters** (2022), Jelnov & Klunover.
- [Games on signed graphs](#), **Automatica** (2022), Li & Morse.
- [Hat guessing on books and windmills](#), **Electronic Journal of Combinatorics** (2022), He, Ido & Przybocinski.
- [Ordinal status games on networks](#), **Journal of Mathematical Economics** (2022), Kukushkin.
- [Peg Solitaire on graphs with jumping and merging](#), **INVOLVE** (2022), Beeler & Kilby.
- [Statistical inference in evolutionary dynamics](#), **Games & Economic Behavior** (2023), Sawa & Wu.
- [Stability of strict equilibria in best experienced payoff dynamics: simple formulas and applications](#), **Journal of Economic Theory** (2022), Izquierdo & Izquierdo.
- [Size-dependent minimum-effort games and constrained interactions](#), **Economics Letters** (2023), Cui, Jiang & Shi.
- [Core stability of the Shapley value for cooperative games](#), **Social choice & Welfare** (2023), Abe & Nakada.
- [Hat guessing numbers of strongly degenerate graphs](#), **Siam Journal of Discrete Mathematics** (2023), Knierim, Martinsson & Steiner.
- Asymptotic welfare performance of Boston assignment algorithms, **Stochastic Systems** (2023), Pritchard & Wilson.
- Best-response dynamics, playing sequences, and convergence to equilibrium in random games, **International Journal of Game Theory** (2023), Heinrich, Jang, Mungo, Pangallo, Scott, Tarbush & Wiese.
- Hat guessing number for the class of planar graphs is at least 22, **Discrete Mathematics** (2024), Latyshev & Kokhas.

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### OTHER PAPERS

- [Rational beliefs when the truth is not an option](#), coauthored with Filippo Massari.  
(supercedes [Learning and equilibrium in misspecified models](#) and [What should economic agents learn in misspecified environments](#))
- [Intentions and game theory](#).
- [Combining strictly asymmetric choice rules](#).
- [Limitations of network games – a brief discussion](#)

### GRANTS

**Discovery Early Career Researcher Award** (awarded by Australian Research Council).

*“Bank regulation: the implications of interconnectedness and adaptive behaviour.”*

**Value :** AUD 368,777                      **Duration:** 2013-15

**KAKENHI B** (awarded by Japan Society for the Promotion of Science).

*“Evolution, misspecification and equilibrium.”*

**Value :** JPY 10,270,000                      **Duration:** 2021-24

### EDITORIAL POSITIONS & FURTHER SERVICE

Associate Editor, **International Journal of Game Theory**, 2022-

Standing Committee of the Econometric Society, Asian Region, 2024-

### INVITED TALKS & CONFERENCES

A list of invited talks is available [here](#).

I have also carried out extended visits to University of Oxford, University of Lausanne, University of Kyoto (before I decided to move here) and Monash University.

### OTHER INFORMATION

**Languages:** Some ability with French, Spanish and Japanese.

**Software:** Capable with Microsoft Office, Mathematica, MatLab.

**Fun:** Used to debate and be heavily involved in politics, hence decent public speaking and lecturing skills.

Completed NVQ course in full body massage, 2000.

The outdoors, hiking, trail running, gym training, coffee, writing and reading, especially fiction and philosophy.