Reading list

Population games & evolutionary dynamics

This list is intended as a sample and is in no way whatsoever intended to be exhaustive! It has a bias towards relatively recent work, from which an interested reader can work backwards.

General

[1] William H. Sandholm. *Population Games and Evolutionary Dynamics*. MIT Press, Cambridge, 2010.

[2] Jonathan Newton. Evolutionary game theory: A renaissance. *Games*, 9(2):31, 2018.

[3] Jörgen W. Weibull. *Evolutionary Game Theory*. MIT Press, Cambridge, 1995.

[4] Josef Hofbauer and Karl Sigmund. *Evolutionary Games and Population Dynamics*. Cambridge University Press, Cambridge, 1998.

The book [1] is a good reference for population games, best response dynamics, logit dynamics, positive correlation, Lyapunov functions, potential functions. The survey [2, Section 7] includes summaries of later work on Riemannian and higher order dynamics.

Imitative dynamics

[5] Panayotis Mertikopoulos and William H Sandholm. Riemannian game dynamics. *Journal of Economic Theory*, 177:315–364, 2018.

[6] Rida Laraki and Panayotis Mertikopoulos. Higher order game dynamics. *Journal of Economic Theory*, 148:2666–2695, 2013.

[7] Peter Duersch, Jörg Oechssler, and Burkhard C. Schipper. Unbeatable imitation. *Games and Economic Behavior*, 76:88–96, 2012.

Best & better response dynamics

[8] Zibo Xu. Convergence of best-response dynamics in extensive-form games. *Journal of Economic Theory*, 162:21–54, 2016.

[9] Dai Zusai. The tempered best response dynamic. *International Journal of Game Theory*, forthcoming, 2017.

[10] Dieter Balkenborg, Josef Hofbauer, and Christoph Kuzmics. Refined best-response correspondence and dynamics. *Theoretical Economics*, 8:165–192, 2013.

Reinforcement learning

[11] Ido Erev and Alvin E. Roth. Predicting how people play games: Reinforcement learning in experimental games with unique, mixed strategy equilibria. *American Economic Review*, 88:848–881, 1998.

[12] Tilman Börgers and Rajiv Sarin. Learning through reinforcement and the replicator dynamics. *Journal of Economic Theory*, 77:1–14, 1997.

[13] Alan W. Beggs. On the convergence of reinforcement learning. *Journal of Economic Theory*, 122:1–36, 2005.

[14] Ed Hopkins. Two competing models of how people learn in games. *Econometrica*, 70:2141–2166, 2002.

Best experienced payoff dynamics

[15] Rajiv Sethi. Stability of equilibria in games with procedurally rational players. *Games and Economic Behavior*, 32:85–104, 2000.

[16] Juan Camilo Cárdenas, César Mantilla, and Rajiv Sethi. Stable sampling equilibrium in common pool resource games. *Games*, 6:299–317, 2015.

[17] Rajiv Sethi. Stable sampling in repeated games. *Journal of Economic Theory*, 197:105343, 2021.

[18] William H Sandholm, Segismundo S Izquierdo, and Luis R Izquierdo. Best experienced payoff dynamics and cooperation in the centipede game. *Theoretical Economics*, 14(4):1347–1385, 2019.

[19] Srinivas Arigapudi, Yuval Heller, and Igal Milchtaich. Instability of defection in the prisoner's dilemma under best experienced payoff dynamics. *Journal of Economic Theory*, 197:105174, 2021.

Continuous strategy space

[20] Man-Wah Cheung. Pairwise comparison dynamics for games with continuous strategy space. *Journal of Economic Theory*, 153:344–375, 2014.

[21] Ratul Lahkar and Frank Riedel. The logit dynamic for games with continuous strategy sets. *Games and Economic Behavior*, 91:268–282, 2015.

Completely uncoupled dynamics

[22] Dean P. Foster and H. Peyton Young. Regret testing: Learning to play Nash equilibrium without knowing you have an opponent. *Theoretical Economics*, 1:341–367, 2006.

[23] Bary SR Pradelski and H Peyton Young. Learning efficient Nash equilibria in distributed systems. *Games and Economic behavior*, 75(2):882–897, 2012.

[24] Yakov Babichenko. Completely uncoupled dynamics and Nash equilibria. *Games and Economic Behavior*, 76(1):1–14, 2012.