

Centers

Center for Cultural Research and Studies



Koji Gotoh
Professor



Koichi Ota
Professor



Noriyuki Kikuchi
Professor



Ken Nakazawa
Senior Associate Professor



Masaya Seino
Senior Associate Professor



Koichi Hasegawa
Senior Associate Professor



Shigeyuki Aoki
Associate Professor



Ryoji Sawa
Associate Professor

Refereed Journal Papers

- [rsawa-01:2014] Jonathan Newton and Ryoji Sawa. A one-shot deviation principle for stability in matching problems. *Journal of Economic Theory*, 157:1–27, May 2015.

This paper considers marriage problems, roommate problems with nonempty core, and college admissions problems with responsive preferences. All stochastically stable matchings are shown to be contained in the set of matchings which are most robust to one-shot deviation.

- [rsawa-02:2014] Ryoji Sawa. Coalitional stochastic stability in games, networks and markets. *Games and Economic Behavior*, 88:90–111, November 2014.

This paper examines a dynamic process of unilateral and joint deviations of agents and the resulting stochastic evolution of social conventions. Our model unifies stochastic stability analysis in static settings, including normal form games, network formation games, and simple exchange economies, as stochastic stability analysis in a class of interactions in which agents unilaterally and jointly choose their strategies. We embed a static setting in a dynamic process; Over time agents revise their strategies based on the improvements that the new strategy profile offers them. In addition to the optimization process, there are persistent random shocks on agents' utility that potentially lead to switching to suboptimal strategies. Under a logit specification of choice probabilities, we characterize the set of states that will be observed in the long-run as noise vanishes. We apply these results to examples of certain potential games.

- [rsawa-03:2014] Ryoji Sawa and Dai Zusai. Evolutionary imitative dynamics with population-varying aspiration levels. *Journal of Economic Theory*, 154:562–577, November 2014.

We consider deterministic evolutionary dynamics under imitative revision protocols. We allow agents to have different aspiration levels in the imitative protocols where their aspiration levels are not observable to other agents. We show that the distribution of strategies becomes statistically independent of the aspiration level eventually in the long run. Thus, long-run properties of homogeneous imitative dynamics hold as well, despite heterogeneity in aspiration levels.

Chapters in Book

Summary of Achievement

[aoki-01:2014] Shigeyuki Aoki. *A Dictionary on British Culture (in Japanese)*, page Chapter 10. Maruzen, 11 2014.

A dictionary entry on John Locke, the defender of empiricism and civil government

Grants

[aoki-02:2014] Shigeyuki Aoki. Fundamental studies on dialectical educational aids for argument education (Principal Investigator: Narahiko Inoue), 2014-2017.

Co-Investigator, Allocated research funds is 500,000 yen (2014)

[aoki-03:2014] Shigeyuki Aoki. Re-examination of Toulmin's Model of Argument in the context of interdisciplinary argument education, and evaluation of new argument model, 2013-2015.

Allocated research funds are 900,000 yen (2013), 1,000,000 yen (2014) and 1,000,000 yen (2015).

[rsawa-04:2014] Ryoji Sawa. Equilibrium selection in multitask environments and cooperative settings, 2015-2017.

Academic Activities

[aoki-04:2014] Shigeyuki Aoki, March 2015.

Presented an invited academic paper, "Critical Thinking and Toulmin's Model of Argument" at Tamagawa University

[aoki-05:2014] Shigeyuki Aoki, November 2014.

Presented an invited academic paper, "From Earth Sciences to Earth Science - Conception of Earth Science" at Institut Latihan Islam Malaysia

[aoki-06:2014] Shigeyuki Aoki, September 2014.

Presented an invited academic paper, "The Uses of Toulmin's Model of Argument - A Report from Classroom Teachings" at Nagoya University

[aoki-07:2014] Shigeyuki Aoki, May 2014.

Presented an academic paper, “Shinjyo Shinzou from the earth-planetary science perspective” at Rakuno Gakuen University

[aoki-08:2014] Shigeyuki Aoki, March 2015.

Presented an academic paper, “Locke and Berkeley on the Impulse Principle” at Konan University

[aoki-09:2014] Shigeyuki Aoki, September 2014.

Presented an academic paper, “Locke and Berkeley - the Historiography in the History of Philosophy” at Aichi Gakuin University

[aoki-10:2014] Shigeyuki Aoki, April 2014.

Presented an academic paper, “Theory Change in Science - Case Study on Solar System Formation” at Makuhari Messe

[aoki-11:2014] Shigeyuki Aoki, August 2014.

Presented an academic paper, “Dialectical Modification of Toulmin’s Model of Argument for Educational Debate” at Kyoto University

[aoki-12:2014] Shigeyuki Aoki, March 2015.

Presented an academic paper, “Debate Education and Logic Education” at Kyushu University

[rsawa-05:2014] Jonathan Newton and Ryoji Sawa, Jan. 2014.

Presented “A one-shot deviation principle for stability in matching problems”.

[rsawa-06:2014] Ryoji Sawa and Dai Zusai, June 2014.

Presented ‘Evolutionary imitative dynamics with population-varying aspiration levels’ at Japanese Economic Association Meeting Spring 2014 at Doshisha U. (Kyoto, Japan).

[rsawa-07:2014] Ryoji Sawa, August 2014.

Presented ‘Stochastic stability in coalitional bargaining problems’ at Econometric Society European Meeting at U. of Toulouse (Toulouse, France).

[rsawa-08:2014] Ryoji Sawa, Oct. 2014.

Presented ‘Stochastic stability in signaling games with a large population’ at Japanese Economic Association Meeting Fall 2014 at Seinan Gakuin U. (Fukuoka, Japan)

Summary of Achievement

[rsawa-09:2014] Ryoji Sawa, July 2014.

Presented 'Stochastic stability in coalitional bargaining problems' at International Conference on Game Theory at Stony Brook U. (NY, USA).