Curriculum Vitae: March, 2023

Hiroto Sato

Contact Information

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Education

April 2021-	Ph.D. in Economics, The University of Tokyo, *Supervisor:* Prof. *Michihiro Kandori*
	(expected completion in March, 2024)
March 2021	M.A.in Economics, The University of Tokyo
March 2019	B.A. in Economics Nagoya University

Research Interests

Microeconomic Theory, Industrial Organization, Information Design, Platform

Publication

"Robust implementation in sequential information design under Supermodular Payoffs and Objective", published in *Review of Economic Design*, 2022.

This paper studies sequential information design (Doval and Ely 2020) in which a designer can construct the extensive form along with the information structure. In this framework, I investigate robust implementations against adversarial equilibrium selection, when players and the designer have a supermodular payoff function with dominant states and an outside option. The main results show that the optimal partially implementable outcome is fully implementable in sequential information design, which essentially coincides with the optimal partially implementable outcome in static information design. For economic applications such as global game of regime change, this paper proposes a way to robustly achieve the desired outcome in static information design by providing the extensive form and the information structure.

Working Paper

"Information Structures in College Admissions" (coauthored with Ryo Shirakawa)

Priority uncertainty is prevalent in practical matching markets. This study investigates the role of priority information structures in a simple decentralized college admissions model. The first main theorem characterizes equilibrium distributions of students across schools, which are implementable with a class of simple disclosure rules, cutoff signals. The cutoff signal induces an ex-ante fair allocation that is also the closest to being ex-post fair among the allocations achieving the same distribution. As an application, we consider an information

design problem. The second main theorem shows that each equilibrium distribution is implementable as a unique equilibrium.

"Information Design for Sponsored Advertising" (coauthored with Ryo Shirakawa)

The third chapter investigate the question: How much sponsored products' information do e-commerce platforms disclose? This study explores platform's information design of maximizing sponsored advertising revenue, where a consumer sequentially search products' information with a deliberate order. In a general ordered search model, the main theorem shows that an optimal signal can be found within the binary signals. The revenue-maximizing search order is characterized by advertising revenue over search cost. The theorem further proves that platform's optimal signal minimizes consumer welfare.

Teaching Experience

2020	Math Camp Day 4 (Dynamic Optimization), Graduate School of Economics *Instructor*
2020	Mathematics for Economics, Graduate School of Economics *Teaching assistant* for Prof. Akihiko Matsui (The University of Tokyo)

Honor & Scholarship

2022-2024	JSPS Research Fellowship for Young Scientists (DC2), Japan Society for the Promotion of Science
2021-2024	Grant-in-Aid for JSPS Fellows, JSPS
2020-2024	World-leading Innovative Graduate Study of Advanced Economics, the University of Tokyo

Presentations

2023	Microeconomics Seminar, Nagoya university (scheduled)
2021	Microeconomics Seminar, The University of Tokyo

Biography

Birthday: January 27, 1997

Citizenship: Japanese