



ON-SITE BIOLOGY COLLOQUIUM

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Hosted by Assoc. Prof Ryan Chisholm

Map to Block S1A



Evolution of human cooperation

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About the Speaker

Hisashi Ohtsuki is a mathematical biologist at SOKENDAI (The Graduate University for Advanced Studies) in Hayama, Japan. He obtained his PhD degree at Kyushu University under the supervision of Prof. Yoh Iwasa in 2006. Hisashi was a postdoctoral researcher at Program for Evolutionary Dynamics, Harvard University (2006-2008), JSPS postdoctoral fellow (2008), JST PRESTO researcher (2008-2012). Hisashi moved to SOKENDAI in 2011 and has been a PI since then. His research interests include social evolution theory, evolutionary game theory, human life-history evolution, cultural evolution, collective decision making, evolution of dispersal, animal behavior modelling, biodiversity, and cancer evolution.

Humans are often characterized as a cooperative species, and it is believed that the capacity to achieve large-scale cooperation was a key to our success on the globe. While almost all non-human cooperation is explained by kin selection, human cooperation is an exception. We humans instead largely rely on relationships of mutual help between genetically unrelated individuals. In particular, one form of reciprocal relationship, called indirect reciprocity, has recently drawn wide attention for explaining large-scale human cooperation. Indirect reciprocity refers to cooperation via reputations and gossips. Those who have a good reputation receive cooperation. We evaluate others' behavior, and we are interested in how we are evaluated by others. In this talk, I will explain the mechanism of indirect reciprocity, experimental results, theoretical difficulty, and my recent theoretical contributions.