

## FMfI2023 Poster Session

Name	Yasuhiro Ishitsuka
Affiliation	Institute of Mathematics for Industry, Kyushu University, Japan
Poster title	<b>Emergent Centrality in a Process of Rank-Based Particles</b>
Abstract	We propose a stochastic process where many agents interact depending on their rank, based on the supplanting moves of Japanese macaques. We study a zero-supplanting limit of overlap centrality, a quantity measuring how often an agent sits in the same place as another agent. Along the way, we use a combinatorial factorization of the transition matrix.
Short Bio	Yasuhiro Ishitsuka is an assistant professor at Institute of Mathematics for Industry at Kyushu University. His main field is diophantine geometry, especially concerns on the statistical behavior of arithmetic objects, and he also works on co-projects on statistical physics and bioinformatics. His hobby is mineral collecting, and his favorites are minerals including strontium.