



Thursday **November 21, 2019** at 14:30

Politecnico di Torino, DISMA, Aula Seminari (third floor)

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Occam's Razor in Opinion Dynamics: The Weighted-Median Influence Process

Prof. Giacomo Como introduces the seminar.

Abstract

Opinion dynamics study how social influence shapes individuals' opinions. Although it is widely adopted that individuals update their opinions by averaging the opinions of others, researchers might need to rethink this micro-foundation. We point out that the weighted-averaging mechanism features a non-negligible unrealistic implication, which limits its predictive power. In this talk, we propose a novel opinion dynamics model, namely a weighted-median mechanism, that is grounded in the framework of cognitive dissonance theory and resolves the shortcomings of weighted averaging. In the spirit of Occam's razor, our new model, despite its simplicity in form, characterizes the sophisticated nature of opinion dynamics and provides a parsimonious explanation for various empirically-observed macroscopic phenomena. Moreover, our model extends, for the first time, the applicability of opinion formation models to the setting of ordered multiple-choice issues.

Biography

Wenjun Mei received the Ph.D. in Mechanical Engineering from University of California, Santa Barbara, and the Bachelor of Science degree in Theoretical and Applied Mechanics from Peking University. He is currently a postdoc researcher at the Automatic Control Laboratory, ETH Zurich. His current research interests include dynamics of social systems, control of network systems, network games, and complex network analysis.