Thursday November 26, 2019 at 14:30
Politecnico di Torino, DISMA, Aula Buzano (third floor)

Carlo CENEDESE

Doctoral Candidate at the University of Groningen

Asynchronous and time-varying proximal type dynamics multi-agent network games

Prof. Giacomo Como introduces the seminar.

Abstract

In this work, we consider proximal type dynamics in the context of noncooperative multi-agent network games. These dynamics arise in different applications, since they describe distributed decision making in multi-agent networks, e.g., in opinion dynamics, distributed model fitting and network information fusion, where the goal of each agent is to seek an equilibrium using local information only. We analyse several conjugations of this class of games, providing convergence results. Namely, for the games subject only to local constraints, we look into both synchronous/asynchronous dynamics and time-varying communication networks. Finally, we validate the theoretical results via numerical simulations on some standard models of opinion dynamics.

Biography

Carlo Cenedese is a Doctoral Candidate, since 2017, with the Discrete Technology and Production Automation (DTPA) Group in the Engineering and Technology Institute (ENTEG) at the University of Groningen, the Netherlands. He was born in Treviso, Italy, in 1991, he received the Bachelor degree in Information Engineering in September 2013 and the Master degree in Automation Engineering in July 2016, both at the University of Padova, Italy. From August to December 2016, Carlo worked for the company VI-grade srl in collaboration with the Automation Engineering group of Padova. His research interests include game theory, distributed optimization, complex networks and multi-agent network systems associated to decision-making processes

Save the date for the next event: November 28, 2019
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