



Dipartimento di Ingegneria Elettrica ed Elettronica
Università degli Studi di Cagliari



12 June 2019, 12:00

Aula Mocci, DIEE, Piazza D'Armi

Engineering complex dynamic systems

Type of Talk: public lecture

Duration: 1 hour

Abstract

Dynamic networked systems need to provide robust and resilient operations while under uncertain and varying conditions. Traditional centralised control paradigm fall short in terms of robustness and decentralised solutions can deviate quite far from optimality. This presentation discusses some practical examples of dynamic networks, with a special attention to the (I)IoT and some recent solutions for distributed learning and control.

Short biography

Alessandro Chiumento is a Research Fellow at CONNECT in Trinity College Dublin. He received his PhD in cellular network management from [Imec](#), Leuven, Belgium, in 2015. He subsequently worked as a postdoctoral researcher at [KU Leuven](#) (Belgium) on massive machine-to-machine communication, channel prediction, very dense networks, and the application of machine learning to theoretical problems in telecommunication and information management.

He is currently an [MSCA EDGE fellow](#) in CONNECT and is working on the project “Internet of Complex Things”, which aims to develop a formal framework for causality in distributed wireless networks and to provide adaptive run-time control methods for vast and dense IoT sensor networks.