

Online seminar

Tuesday June 08, 2021 at 16:30 Hosted on: Zoom

## **Tiziano DE ANGELIS**

Università di Torino

## Dynkin games with partial and asymmetric information

Prof. Pellerey introduces the seminar.

## Abstract

I will review some recent results obtained in collaboration with Ekström, Glover, Merkulov and Palczewski concerning existence of equilibria for Dynkin games with partial and asymmetric information. I will present a general result for the existence of a saddle point in zero-sum non-Markovian Dynkin games. Then I will illustrate explicit solutions to two specific problems: a zero-sum game with asymmetric information on the drift of a geometric Brownian motion and a non-zero sum game with uncertain competition. The construction of all equilibria relies upon the use of randomised stopping times.

[1] T De Angelis, E Ekström and K Glover, *Dynkin games with incomplete and asymmetric information*, to appear in Math. Oper. Res., 2021.
[2] T De Angelis and E Ekström, *Playing with ghosts in a Dynkin game*, Stoch. Process. Appl., 130(10), 6133-6156, 2020.
[3] T De Angelis, N Merkulov and Jan Palczewski, *On the value of non-Markovian Dynkin games with partial and asymmetric information*, arXiv 2007.10643, 2021.

## Biography

Tiziano De Angelis is Associate Professor in Mathematical Analysis, Probability and Statistics at School of Management and Economics, Università di Torino. He obtained his PhD in Mathematics for Economic-Financial Applications at La Sapienza, Università di Roma, in 2012. Then he moved to the School of Mathematics - University Manchester, form 2012 to 2015, and to the School of Mathematics - University of Leeds, from 2015 to 2020. His research interests span optimal stopping, singular stochastic control, free-boundary problems, stochastic games, mathematical finance, and energy markets.