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DI TORINO



Dipartimento di
Scienze Matematiche
G. L. Lagrange

ECCELLENZA 2018 • 2022

Online
seminar

Monday **June 21, 2021** at 16:30

Hosted on: **Zoom**

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Algebraic Approach to Duality Theory and Some Applications

Prof. Cappelletti introduces the seminar.

Abstract

In this talk I will introduce some Markov processes which are solvable by duality and I show how a duality relation can be constructed starting from Lie algebras. Moreover, we will see that the stationary measure of the processes in an open, out of equilibrium setting can be characterized.

Biography

Chiara Franceschini is a postdoctoral researcher in Mathematics at Instituto Superior Técnico de Lisboa (IST), working between probability theory and statistical physics. She received the Bachelor degree from Università di Modena e Reggio Emilia in 2014, the Master degree from University of Wisconsin - Madison in 2016, and the PhD in Mathematics from Università di Ferrara in 2018.

Her research interests consider interacting particle systems and their scaling limit, stochastic duality theory for Markov processes and non-equilibrium statistical mechanics.