

# ICTP-SAIFR/IFT-UNESP PHYSICS DISCUSSIONS

MAY 19, 2021 • 13:40pm

**LETICIA CUGLIANDOLO** (SORBONNE UNIVERSITY, PARIS)

## THERMODYNAMIC CONCEPTS OUT OF EQUILIBRIUM: FROM CLASSICAL TO QUANTUM



In this talk Prof. Cugliandolo will present two seemingly different examples of macroscopic systems evolving out of equilibrium which are attracting much theoretical and experimental attention. These are classical active matter and quenched quantum isolated low dimensional systems. Although we may ignore the details of their asymptotic behaviour and their full statistical description, she will argue that an effective temperature can be identified and used as a guideline to grasp at least some of the macroscopic properties of these problems. Prof. Cugliandolo will finally speculate about how one could build upon these results to improve our understanding of the physics far from equilibrium.

**LETICIA CUGLIANDOLO** is a condensed matter physicist known for her research on non-equilibrium thermodynamics, spin glass, and glassy systems. She won the Prix Paul Langevin in 2002, and in the same year won the Marie Curie award of the European Commission. She won the Irène Joliot-Curie Prize for female scientist of the year in 2015.

**MORE INFORMATION:** [ictp-saifr.org/physicsdiscussions](https://ictp-saifr.org/physicsdiscussions)