



UNIVERSITÄT
LEIPZIG

Fakultät für Physik und
Geowissenschaften

Prof. Dr. J. Deiglmayr
Prof. Dr. J. Vollmer

Physics Colloquium

Tuesday, 21 June 2022 at 17:00

Prof. Dr. Massimiliano Esposito

Complex systems and statistical mechanics, University of Luxembourg

Nonequilibrium Thermodynamics of Complex Systems

I will start by discussing some of the main challenges that one faces when trying to formulate a nonequilibrium thermodynamics of complex systems. I will then discuss how to use stochastic thermodynamics to make progress in that direction.

Concrete evidence will be provided by considering applications to energy transduction in (bio-) chemical reaction networks, low power computation with nonlinear electronic circuits, and non-equilibrium phase transitions in Potts models.



joint colloquium with SFB TRR 102



Venue: Hörsaal für Theoretische Physik, Linnéstraße 5

Before the lecture we offer coffee in front of the lecture hall.