

Module: Elective Advanced Lectures: BCGS Courses

Module No.: physics70d

Course:



Statistical physics far from equilibrium (T)

Course No.:

Category	Type	Language	Teaching hours	CP	Semester
Elective	Lecture with exercises	English	4+2	8	ST

Requirements for Participation:

Preparation:

Advanced statistical mechanics

Form of Testing and Examination:

Oral examination

Length of Course:

1 semester

Aims of the Course:

Understanding the generic behavior of fluctuation-dominated systems far from equilibrium, and acquaintance with the basic mathematical tools used for their description.

Contents of the Course:

Stochastic methods
Transport processes
Scale-invariant growth
Pattern formation far from equilibrium

Recommended Literature:

P.L. Krapivsky, S. Redner and E. Ben-Naim: A kinetic view of statistical physics (Cambridge University Press, 2010)
M. Kardar, Statistical Physics of Fields (Cambridge University Press, 2007)