SEMPARIS – Séminaires en région parisienne

Forum de Physique Statistique @ ENS

Mercredi 23 Fevrier 2022, 14 :30
LPENS, Salle Djebar (29 rue d'Ulm)(please write to xiangyu.cao@ens.fr
for a zoom link.)
Domaines : cond-mat.stat-mech

Titre : *A journey from classical integrability to the large deviations of the
Kardar-Parisi-Zhang equation*

Orateur : **Alexandre Krajenbrink (SISSA)**

Résumé : *In this talk, I will revisit the problem of the large deviations of the
Kardar- Parisi-Zhang (KPZ) equation in one dimension at short time by
introducing a novel approach which combines field theoretical, probabilistic
and integrable techniques. My goal will be to expand the program of the weak
noise theory, which maps the large deviations onto a non-linear hydrodyna-
mic problem, and to unveil its complete solvability through a connection to
the integrability and the scattering theory of the Zakharov-Shabat system.*