

ATELIER « SYSTÈMES STOCHASTIQUES DE PARTICULES EN INTERACTION »
18–23 MAI 2009

WORKSHOP “INTERACTING STOCHASTIC PARTICLE SYSTEMS”
MAY 18–23, 2009

Superdiffusivity for Asymmetric Energy Model in Low Dimension

CÉDRIC BERNARDIN

UMPA, UMR CNRS 5669
ENS Lyon
46 Allée d'Italie
69364 LYON Cedex 07
FRANCE

`cbernard@umpa.ens-lyon.fr`

We consider a non attractive asymmetric model of Interacting Brownian Diffusions that conserves energy. This system is expected to belong to the KPZ class. Using generalized duality techniques we obtain diverging lower bounds in dimension 1 and 2 for the diffusion coefficient.