Abstract for an Invited Paper
for the MAR08 Meeting of
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**Rare events and phase transitions in reaction diffusion systems**¹

ALEX KAMENEV, University of Minnesota

I shall discuss a way to evaluate tails of the probability distribution functions in stochastic reaction-diffusion models. The method is based on the semi-classical treatment of a proper “quantum” field theory, which may be associated with reaction-diffusion systems. The same set of ideas may be applied to a classification of non-equilibrium phase transitions, taking place in these models.


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