arXiv.org > math-ph > arXiv:1206.0168

Mathematical Physics

Energy fluctuations, hydrodynamics and local correlations in harmonic systems with bulk noises

Jani Lukkarinen

(Submitted on 1 Jun 2012 (v1), last revised 3 Aug 2012 (this version, v2))

In this note, I summarise and comment on joint work with C. Bernardin, V. Kannan and J. L. Lebowitz concerning two harmonic systems with bulk noises whose nonequilibrium steady states (NESS) are nearly identical (they share the same thermal conductivity and two-point function), but whose hydrodynamic properties (convergence towards the NESS) are very different. The goal is to discuss the results in the general context of nonequilibrium properties of dynamical systems, in particular, what they tell us about possible effective models, or predictive approximations, for such systems.

Cite as: **arXiv:1206.0168 [math-ph]**

(or **arXiv:1206.0168v2 [math-ph]** for this version)

Submission history

Which authors of this paper are endorsers?

Download:

Current browse context:

math-ph

Change to browse by:

References & Citations

Bookmark(what is this?)