Quantum Physics

Random Hamiltonian in thermal equilibrium

Dorje C. Brody, David C. P. Ellis, Darryl D. Holm

(Submitted on 14 Jan 2009)

A framework for the investigation of disordered quantum systems in thermal equilibrium is proposed. The approach is based on a dynamical model--which consists of a combination of a double-bracket gradient flow and a uniform Brownian fluctuation--that `equilibrates' the Hamiltonian into a canonical distribution. The resulting equilibrium state is used to calculate quenched and annealed averages of quantum observables.

Comments:	8 pages, 4 figures. To appear in DICE 2008 conference proceedings
Subjects:	**Quantum Physics (quant-ph)**; Statistical Mechanics (cond-mat.stat-mech)
Cite as:	**arXiv:0901.2025v1 [quant-ph]**

Submission history

From: Dorje C. Brody [view email]
[v1] Wed, 14 Jan 2009 14:38:21 GMT (732kb)

Which authors of this paper are endorsers?

Download:

- PDF
- PostScript
- Other formats

Current browse context:
quant-ph
< prev | next >
new | recent | 0901

Change to browse by:

cond-mat
    cond-mat.stat-mech

References & Citations

- SLAC-SPIRES HEP (refers to | cited by)
- CiteBase

Bookmark(what is this?)

[×] CiteULike logo	
[×] Connotea logo	
[×] BibSonomy logo	
[×] Mendeley logo	
[×] Facebook logo	
[×] del.icio.us logo	
[×] Digg logo	[×] Reddit logo

Link back to: arXiv, form interface, contact.