Quantum Physics

Guessing Quantum Ensemble Using Laplace Principle

Georges Parfionov, Romàn R. Zapatrin

(Submitted on 23 Jan 2009)

For a mixed quantum state with density matrix ρ there are infinitely many ensembles of pure quantum states, which average to ρ. Starting from Laplace principle of insufficient reason (not to give \emph {a priori} preference to any particular state), we derive a `natural' distribution of pure states averaging to $\rho$, which is `more spread' than all the others.

Comments:	11 pages, LaTeX. Talk presented at Quantum Structures - 2008 (July 6-12, 2008, Sopot, Poland)
Subjects:	**Quantum Physics (quant-ph)**
Cite as:	**arXiv:0901.3771v1 [quant-ph]**

Submission history

From: Romàn R. Zapatrin [view email]
[v1] Fri, 23 Jan 2009 20:18:38 GMT (8kb)

Which authors of this paper are endorsers?