On the statistical viewpoint concerning the 2nd law
of thermodynamics - OR - A reminder on the Ehrenfests'
urm model

Giulini, Domenico (2005) On the statistical viewpoint concerning the 2nd law
of thermodynamics - OR - A reminder on the Ehrenfests'
urm model.

Full text available as:
PDF - Requires a viewer, such as Adobe Acrobat Reader or other PDF viewer.

Abstract

In statistical thermodynamics the 2nd law is properly spelled out in terms of conditioned probabilities. As such it makes the statement, that `entropy increases with time' without preferring a time direction. In this paper we try to explain this statement---which is well known since the time
of the Ehrenfests---in some detail within a systematic Bayesian approach.

Keywords:	Ehrenfest, urn model, 2nd law of thermodynamics, direction of time, thermodynamic arrow of time
Subjects:	Specific Sciences: Physics: Classical Physics
ID Code:	2453
Deposited By:	Giulini, Domenico
Deposited On:	15 September 2006
Additional Information:	Also published in the arXiv physics/0509220