

Thermodynamic Irreversibility: Does the Big Bang Explain what it Purports to Explain?

Parker, Daniel (2005) Thermodynamic Irreversibility: Does the Big Bang Explain what it Purports to Explain?. In *Proceedings Philosophy of Science Assoc. 19th Biennial Meeting - PSA2004: PSA 2004 Contributed Papers*, Austin, TX.

This is the latest version of this eprint.

Full text available as:

Microsoft Word - Requires a viewer, such as Microsoft Word Viewer

Abstract

In this paper I examine Albert's (2000) claim that the low entropy state of the early universe is sufficient to explain irreversible thermodynamic phenomena. In particular, I argue that conditionalising on the initial state of the universe does not have the explanatory power it is presumed to have. I present several arguments to the effect that Albert's 'past hypothesis' alone cannot justify the belief in past non-equilibrium conditions or ground the veracity of records of the past.

Keywords: Past Hypothesis, Big Bang, Reversibility objection, Statistical Mechanics,

Thermodynamics

Subjects: Specific Sciences: Physics

Specific Sciences: Physics: Statistical Mechanics/Thermodynamics

Conferences and Philosophy of Science Assoc. 19th Biennial Meeting - PSA2004: PSA 2004

Volumes: Contributed Papers

ID Code: 2166

Deposited By: Parker, Daniel

Deposited On: 21 January 2005

Available Versions of this Item

Thermodynamic Irreversibility: Does the Big Bang Explain what it Purports to Explain? (deposited 21 January 2005) [Currently Displayed]

Send feedback to: philsci-archive@library.pitt.edu