

Deterministic versus indeterministic descriptions: not that different after all?

Werndl, Charlotte (2009) Deterministic versus indeterministic descriptions: not that different after all?.

Full text available as:

[PDF](#) - Requires a viewer, such as [Adobe Acrobat Reader](#) or other PDF viewer.

Abstract

The guiding question of this paper is: how similar are deterministic descriptions and indeterministic descriptions from a predictive viewpoint? The deterministic and indeterministic descriptions of concern in this paper are measure-theoretic deterministic systems and stochastic processes, respectively. I will explain intuitively some mathematical results which show that measure-theoretic deterministic systems and stochastic processes give more often the same predictions than one might perhaps have expected, and hence that from a predictive viewpoint these descriptions are quite similar.

Keywords: observational equivalence, determinism, indeterminism, ergodic theory, stochastic processes

Subjects: [Specific Sciences: Complex Systems](#)
[Specific Sciences: Physics](#)
[General Issues: Determinism/Indeterminism](#)

ID Code: 4775

Deposited By: [Werndl, Charlotte](#)

Deposited On: 27 July 2009

Additional Information: Contribution in: A. Hieke and H. Leitgeb (eds), Reduction, Abstraction, Analysis, Proceedings of the 31st International Ludwig Wittgenstein-Symposium. Ontos, pp. 63-78.