

Isolation and folk physics

Elga, Adam (2005) Isolation and folk physics.

Full text available as:

PDF - Requires a viewer, such as Adobe Acrobat Reader or other PDF viewer.

Abstract

There is a huge chasm between the notion of lawful determination that figures in fundamental physics, and the notion of causal determination that figures in the "folk physics" of everyday objects. In everyday life, we think of the behavior of an ordinary object as being determined by a small set of simple conditions. But in fundamental physics, no such conditions suffice to determine an ordinary object's behavior. What bridges the chasm is that fundamental physical laws make the folk picture of the world approximately true in certain domains. How? In part, by entailing that many objects are approximately isolated from most of their environments. Dynamical laws yield this result only in conjunction with appropriate statistical assumptions about initial conditions.

Keywords: folk physics, causation, bertrand russell, isolation, causal graph

Subjects: General Issues: Causation

Specific Sciences: Physics: Statistical Mechanics/Thermodynamics

ID Code: 2678

Deposited By: Elga, Adam
Deposited On: 20 March 2006

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