

The Dome: An Unexpectedly Simple Failure of Determinism

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Abstract

Because of the specific shape of the dome at its apex, Newton's equations of motion tell us that a mass at rest at the apex can spontaneously be set into motion. It has been suggested that this indeterminism should be discounted since it draws on an incomplete rendering of Newtonian physics; or it is "unphysical"; or it employs illicit idealizations. I analyze and reject each of these reasons.

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