Extracting physical consequences from the existence of random attractors

James Robinson

Abstract

There are a number of results for deterministic systems that provide physically relevant results assuming the existence of a finite-dimensional attractor. However, all these results require a bound on the box-counting dimension of the attractor, rather than on its Hausdorff dimension. In this talk I will briefly outline how to extend results of Debussche that bound the Hausdorff dimension of random attractors to treat the box-counting dimension, and then discuss the physical consequences of such bounds.