Douglas COATES

Title: Persistent non-statistical behaviour in one dimension

Abstract:
I will present recent work joint with Stefano Luzzatto in which we study a class F of full branched maps admitting two indifferent fixed points as well as critical points and/or unbounded derivative. We introduce a natural topology on the class F and show that there is a dense subset G of maps which are non-statistical (and in particular which have no physical measure). Moreover, we show that the non-statistical behaviour of the maps in G is persistent under a relatively large class of perturbations.