

Speaker: Sebastian van Strien (Imperial College London)

Title : Stochastic stability of expanding circle maps with neutral fixed point

Abstract:

One of the best known dynamical systems with intermittency behaviour is the well-known Pomeau-Manneville circle map. This map has a neutral fixed point at 0 which causes orbits to linger there for long periods. Nevertheless this map has always a physical measure: for  $\alpha \geq 1$  it is the Dirac measure at 0 while for  $\alpha \in (0, 1)$  it is absolutely continuous. It was also known for quite a while that this map is stochastically stable when  $\alpha \geq 1$ . In this talk I will discuss a result which implies that this map is also stochastic stable when  $\alpha \in (0, 1)$ . (joint with Weixiao Shen)