The dimension of the Feigenbaum attractor.

Mark Pollicott University of Warwick

An interesting ingredient in the classical Feigenbaum renormalization theory for unimodal maps is a Cantor set in the real line called the Feigenbaum attractor. There are a number of estimates on its dimension, including rigorous bounds by Falconer (1985) and Burbanks-Osbaldestin-Thurlby (2021) and heuristic bounds by Christiansen-Cvitanovic-Rugh (1990). We will discuss these and propose some new values.