

## On the denseness of finitude of sinks

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In 1995, Jacob Palis stated an ambitious conjecture on denseness of finitude of attractors for diffeomorphisms in arbitrary dimensions. Before that, Newhouse proved the existence of residual sets of surface diffeomorphisms (in certain nonempty open sets) in the  $C^2$  topology displaying infinitely many sinks (hyperbolic periodic attractors), and Bonatti and Diaz did the same in the  $C^1$  topology in higher dimensions. We will discuss the problem of proving the denseness (in the  $C^1$  topology) of diffeomorphisms (in arbitrary dimensions) displaying only a finite number of sinks. This is a joint work with Fernando Lenarduzzi and Jacob Palis.