Bern-Fribourg Graduate Seminar

a seminar for Master and PhD students

Thursday 19th May, 2022: 17:15 - 18:00 Room 2.52, Perolles 08, Fribourg

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Dynamical properties of pseudo-Anosov maps

Abstract

We will begin with a discussion of particular homeomorphisms of the torus, called Anosov maps. In particular, we will see why an Anosov map has a dense orbit and why the set of all periodic orbits is dense in the torus. We will then extend our discussion to pseudo-Anosov maps, which are homeomorphisms of higher genus surfaces with dynamical properties similar to those of Anosov maps. Each pseudo-Anosov map comes together with an algebraic integer called the stretch factor, and we will end our discussion by presenting some open questions about them.