



Analysis Seminar

Title: Symbolic dynamics for billiards

Speaker: Yuri Lima (Universidade Federal do Ceará)

Date: Fri 15th February 2019 at 3:00PM

Location: Seminar Room SCN 1.25

Abstract: One of the classical examples in dynamical systems are billiards: introduced more than a century ago, they are a simplification of Boltzmann's model in statistical mechanics. However, due to the presence of singularities, most of the usual theory in dynamics does not apply to them. In this talk, I will present an approach, using symbolic dynamics, that allows to better understand billiards. The main result, apparently expected since the 70s (when symbolic dynamics was extensively applied to hyperbolic diffeos/flows), was only recently obtained. Joint work with Carlos Matheus.