

Polygonal Billiards and Low Complexity Dynamical Systems

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Resumo/Abstract:

Low complexity and high complexity dynamical systems differ in fundamental ways. I will discuss some of the properties of low complexity systems and some of the special techniques which are used to understand them in the particular case of polygonal billiards tables. I will describe joint work with Corinna Ulcigrai which is motivated by work of Morse, Hedlund, Rauzy and others on Sturmian sequences and work of Veech on polygonal billiards.