



UNIVERSIDADE FEDERAL DE ALAGOAS
PROGRAMA DE PÓS GRADUAÇÃO EM MATEMÁTICA
PROGRAMA DE VERÃO 2020



Seminário de Geometria Diferencial & Análise Geométrica

Título: Area of cycles with geodesic boundary

Palestrante: Moreno Bonutti - UFAL/Arapiraca

Resumo: In this talk, we will prove two results for the model $(M, \partial M) = (\Sigma, \partial\Sigma) \times \mathbb{S}^1$, where $(\Sigma, \partial\Sigma)$ is a hyperbolic manifold with totally geodesic boundary. The first result, using the Larry Guth's techniques and under an upper bound on the volumes of unit balls in the universal cover of $(M, \partial M)$, we show that the volume of a hyperbolic manifold with totally geodesic boundary has a relation to its simplicial volume. Moreover, under those hypothesis, we generalized a result of Hannah Alpert and Kei Funano, showing that the area of \mathbb{Z}_2 -relative homology class $[(\Sigma, \partial\Sigma)]$ in $(M, \partial M)$ is proportional to the area of $(\Sigma, \partial\Sigma)$.

Local: Sala 103 da Pós-Graduação - IM Novo

Data: Quarta-feira, 22 de janeiro de 2020

Hora: 10h30