



Speaker: Ricardo Mendes
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Thursday, August 17, 2017

11:00 AM

258 Hurley Hall

Title: Minimal hypersurfaces in compact symmetric spaces

Abstract:

(joint work with Marco Radeschi) For any compact symmetric space M , and closed, minimal, immersed hypersurface S , we give a lower bound on the index plus nullity of S . This bound is linear in the first Betti number of S , with coefficient that depends only on M , and gives a partial answer to a conjecture of Marques-Neves-Schoen. The proof builds upon methods used by Ros, Savo, Ambrozio-Carlotto-Sharp and others. The novelty is that instead of employing an isometric immersion of M into Euclidean space, we consider an embedding of TM into a flat trivial bundle. As a byproduct we give an apparently new characterisation of compact symmetric spaces.