INSALATE DI MATEMATICA

presents

30/04/2025 LETIZIA BRANCA

Università degli Studi di Milano Riemannian functionals and critical metrics in dimension four and beyond



Abstract:

Many of the so-called canonical (or special) metrics arise as critical points of suitable L^p -norms of the components of the Riemann curvature tensor. This object encodes the geometry of the manifold and, in dimension 4, it admits a peculiar decomposition. Throughout the talk, we will explore some known results and open problems concerning Riemannian functionals and critical metrics in dimension 4 and beyond. In particular we will focus on optimal pinching results for Einstein manifolds.

Keywords: Riemannian functionals · canonical metrics · Einstein manifolds.

Dipartimento di Matematica e Applicazioni Università degli Studi di Milano-Bicocca U5-3014 04:30 pm (CEST)

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"Obvious" is the most dangerous word in mathematics. (Eric Temple Bell)