SEMINARIO DI GEOMETRIA E ALGEBRA

UNIBA - POLIBA

Martedì 16 settembre 2025 - Ore 15:30 Dip. di Matematica UniBa, Aula IX, primo piano

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Bonnet-Myers type theorems for Sasaki-Ricci solitons

Abstract. One of the most fundamental topics in Riemannian geometry is to investigate the relation between topology and geometric structure on Riemannian manifolds. A Sasaki-Ricci soliton is a generalization of a Sasaki-Einstein manifold, and plays an important role in the study of the Sasaki-Ricci flow. In this talk, we give several new Bonnet–Myers type theorems for complete Sasaki-Ricci solitons. These theorems not only extend Bonnet–Myers type theorems for complete Ricci solitons due to M. Fernandez-Lopez & E. Garcia-Rio (Math. Ann. 38 (2008), 893-896) and M. Limoncu (Math. Z. 271 (2012), 715-722), but also generalize the Bonnet–Myers type theorems for complete Sasaki manifolds due to I. Hasegawa & M. Seino (J. Hokkaido Univ. Education 32 (1981), 1-7) and Y. Nitta (Ann. Sc. Norm. Super. Pisa Cl. Sci. (5) 13 (2014), 207–224).

