



Special Colloquium

DR. LUCA DI CERBO
STONY BROOK UNIVERSITY

"NEGATIVELY CURVED MANIFOLDS, BETTI NUMBERS, AND SINGER'S CONJECTURE"

The study of negatively curved manifolds is at the crossroads of modern geometry and topology. In this talk, I will present new ideas and techniques for studying the cohomology of such manifolds. More precisely, I will discuss the asymptotic growth rate of Betti numbers in towers of hyperbolic manifolds and general vanishing results for Atiyah's L2-Betti numbers. Finally, I will explain the connection between such results and the longstanding Singer conjecture. This is an overview of two joint projects with M. Stern.

Friday, January 19th, 2018

Surge 284

Tea Time @ 4:00 p.m.

Talk Begins @ 4:10 p.m.

Ends @ 5:10 p.m.

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