Colloquium

UNIVERSITY OF NOTRE DAME
Department of Mathematics

Speaker: **Vitali Kapovitch**
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Thursday, November 10, 2011
2:00 pm
125 Hayes-Healy Hall

Title: Structure of fundamental groups of manifolds with Ricci curvature bounded below

Abstract:
We prove several structure results about fundamental groups of manifolds with Ricci curvature bounded below. In particular we prove the following Generalized Margulis Lemma. In each dimension n there are positive constants C and ϵ such that for any complete manifold M^n with $\mathrm{Ric} > -(n-1)$ the subgroup of the fundamental group generated by loops contained in any ϵ-ball contains a nilpotent subgroup of index at most C. This is joint work with Burkhard Wilking.