1006-51-265 **Nicolas Monod*** (monod@math.uchicago.edu), 5734 S University Ave, Chicago, IL 60637.
Geometric splitting and superrigidity.

Mostow's rigidity theorem states that within a rich class of manifolds of dimension > 2, the fundamental group completely determines the geometry. (The manifolds in question are basically locally symmetric spaces of finite volume.)

In the broader framework of non-positive curvature, a classical splitting theorem (due to Lawson-Yau and Gromoll-Wolf) shows that a product decomposition of the fundamental group forces a geometric (isometric) splitting of the manifold.

Upon reformulating Mostow's theorem in terms of lattices in Lie groups, one can consider Margulis' superrigidity theorem as a sweeping extension of the former.

We shall review this context and propose a point of view that unifies some aspects of the theorems of Margulis' and Lawson-Yau/Gromoll-Wolf. We propose to work in the more general –yet much more simple-minded– context of Hadamard metric spaces, thus obtaining simple geometric proofs that can be outlined in an elementary language. (Received February 16, 2005)