

ATELIER « ASPECTS GÉOMÉTRIQUES, ASYMPTOTIQUES ET COMBINATOIRES DE LA THÉORIE DES GROUPE ET LEURS APPLICATIONS (GAGTA) »

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WORKSHOP ON “GEOMETRIC, ASYMPTOTIC, COMBINATORIAL GROUP THEORY WITH APPLICATIONS (GAGTA)”

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## Asymptotic cones of groups

Mark Sapir

Department of Mathematics  
Vanderbilt University  
1326 Stevenson Center  
Nashville, TN 37240-0001  
USA

msapir@math.vanderbilt.edu

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I am going to talk about asymptotic geometry of groups, specifically about asymptotic cones and their applications. Here are few of the topics I will talk about :

1. Asymptotic cones, applications to Dehn functions, divergence of geodesics, and equations over groups.
2. A characterization of relatively hyperbolic groups. Tree-graded spaces.
3. The asymptotic cones of the mapping class groups of surfaces.