The Worldwide Center of Mathematics

Real quasi-toric manifolds and their homology

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Friday, February 5, 2010
Coffee, tea, cookies: 3:30pm
Talk: 4-5pm
929 Massachusetts Ave., Cambridge, Suite #102

Abstract: Real quasi-toric manifolds are topological spaces having well-behaved torus actions and combinatorially rich quotient spaces. They are closely related to toric varieties, e.g., the set of real points of a smooth projective toric variety is a real quasi-toric manifold. Their mod 2 homology is well-understood, but virtually nothing is known about integral homology. In this talk I will outline a strategy for computing the Betti numbers of a real quasi-toric manifold. The techniques used draw inspiration from Fox's free calculus and the representation theory of finite groups.

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All attendees will need to sign a release form, as the lecture will be recorded for distribution on the Web.