Geometry Seminar
Tuesday, Feb 22, 2011
Room 201 WWH at 6:00 P.M.

Two Generalizations of the Ham Sandwich Theorem

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The Ham Sandwich Theorem states that for any n finite Borel measures on $\mathbb{R}^n$, there exists a hyperplane which bisects each of the n measures.

This talk will present two generalizations of this theorem. In one direction, we ask for the number of mutually orthogonal hyperplanes which bisect a collection of measures, and we will provide a lower bound for this number depending on the maximum number of linearly independent vector fields on a sphere. We will also provide group-theoretic generalizations of the Ham Sandwich Theorem for fundamental regions corresponding to finite subgroups of the unit complex numbers S^1 and the unit quaternions S^3.

For more information please visit the seminar website at:
`http://www.math.nyu.edu/seminars/geometry_seminar.html`.