

Geometry Seminar  
Tuesday, October 19, 2010  
Room 201 WWH at 6:00 P.M.

# Improved Bounds for Geometric Permutations.

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We show that the number of geometric permutations of an arbitrary collection of  $n$  pairwise disjoint convex sets in  $\mathbb{R}^d$ , for  $d \geq 3$ , is  $O(n^{2d-3} \log n)$ , improving Wenger's 20 years old bound of  $O(n^{2d-2})$ .

Joint work with Haim Kaplan and Micha Sharir.

For more information please visit the seminar website at:  
[http://www.math.nyu.edu/seminars/geometry\\_seminar.html](http://www.math.nyu.edu/seminars/geometry_seminar.html).