## Geometry Seminar Tuesday, November 17, 2009 Room 202 WWH at 6:00 P.M.

## On two Helly-type theorems

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We will discuss the following two problems:

- 1. Is it true that a finite family F of at least five convex bodies in  $\mathbb{R}^n$  consists of isothetic parallelotopes provided any family of translations of F has Helly number two?
- 2. Determine the least positive integer N = N(n) such that any finite separated collection of at least N convex bodies in  $\mathbb{R}^n$  has a common support hyperplane provided any n+1 of the bodies have a common support hyperplane.

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