## **Logic Seminar**

On flat combinatorial pregeometries and hypergraphs.

Omer Mermelstein (Wisconsin)

**Abstract:** The property of "flatness" of a pregeometry (matroid) is best known in model theory as the device with which Hrushovski showed that his example refuting Zilber's conjecture does not interpret an infinite group. Indeed, the pregeometry associated to any hypergraph via Hrushovski's delta-function is flat, and it is known that any finite flat pregeometry (strict gammoid) can be gotten from hypergraph. In this talk, we will explain what flatness actually is, show that the interplay between hypergraphs and flat pregeometries runs deeper than the finite case, present some limited results and conjectures based on these.

Tuesday, October 2 at 3:30 PM in 427 SEO