Mathematics, Statistics, and Computer Science   **@ UIC**

Set Theory Seminar

Fine structure, part I

Sherwood Hachtman (UIC)

Abstract: Jensen invented the fine structure theory in order to make a detailed analysis of Godel's constructible universe, L. Today the fine structure theory is fundamental to an understanding of inner models for large cardinals. We aim to develop the basic theory for L and use it to prove some of the earliest applications, including that $\square_\kappa$ holds in L for all cardinals κ, and Jensen's Covering Theorem: If $0^{\#}$ does not exist, then every uncountable set of ordinals is contained in a constructible set of the same size.

Monday, February 8 at 3:00 PM in SEO 427