Mathematics, Statistics, and Computer Science @ UIC

Distinguished Lecture Series

The AD+ Duality Program and the Ultimate-L Conjecture

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Abstract: The determinacy axiom, AD, was introduced by Mycielski and Steinhaus over 60 years ago as an alternative to the Axiom of Choice for the study of arbitrary sets of real numbers. The modern view is that determinacy axioms concern generalizations of the borel sets, and deep connections with large cardinal axioms have emerged. Further a specific technical refinement of AD, this is the axiom AD+, has also been isolated. The further connections with large axioms have implicitly led to a duality program, which is the AD+ Duality Program. The central open problems here are intertwined with those of the Inner Model Program, and this is distilled into a specific conjecture, the Ultimate-L Conjecture. This conjecture, and its related problems, are now arguably the key problems in both AD+-theory and the Inner Model Program.

Discussion in SEO 300

Thursday, April 14 at 4:00 PM in LC D1