Abstract: There are many open problems in the model theory of well founded models of ZFC. Cohen's method of forcing, including the generalization to class forcing, is the main technique for building models of ZFC. But consider the following problem. Suppose ZFC + \( \text{ has a unique well founded model. Must that model satisfy } V = L? \) No counterexample can be a nontrivial class forcing extension of any other model, and moreover that model of ZFC + must be countable and belong to L (by Shoenfield absoluteness). This suggests that any such model must satisfy \( V = L \). Rephrased, if ZFC + is both \(-\)consistent and \(-\)categorical then the natural conjecture is that \( ZFC + V = L \). However relativising to a real and assuming large cardinals, there are counterexamples, and in the strongest possible sense. This is joint work with Peter Koellner.

Discussion in SEO 300

Friday, April 15 at 3:00 PM in LC D5