

Logic Seminar

Bi-embeddability and isomorphism: the weakly minimal case.

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Abstract: Recently (in joint work with Chris Laskowski) we characterized countable, weakly minimal theories T such that any two (elementarily) bi-embeddable models of T are isomorphic. We prove that if T is countable and weakly minimal, the following are equivalent:

1. T has two bi-embeddable but nonisomorphic models;
2. There is an automorphism f of the monster model of T and a strong type p over the empty set which is almost-orthogonal to $f(p) \otimes \dots \otimes f^n(p)$ for any n .
3. T has an infinite collection of models that are pairwise bi-embeddable but pairwise nonisomorphic.

The proof involves some geometric stability theory plus a Dushnik-Miller type argument to build nonisomorphic models by "killing" every potential isomorphism at each stage of the construction.

Tuesday, November 3 at 4:00 PM in SEO 612

seminar begins with tea

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