

Logic Seminar

Forcing with finite conditions and preserving CH

Miguel Angel Mota (Instituto Tecnológico Autónomo de México)

Abstract: In the last years there has been a second boom of the technique of forcing with side conditions (see for instance the recent works of Asperl-Mota, Krueger and Neeman describing three different perspectives of this technique). The first boom took place in the 1980s when Todorćević discovered a method of forcing in which elementary substructures are included in the conditions of a forcing poset to ensure that the forcing poset preserves cardinals. More than twenty years later, Friedman and Mitchell independently took the first step in generalizing the method from adding small (of size at most the first uncountable cardinal) generic objects to adding larger objects by defining forcing posets with finite conditions for adding a club subset on the second uncountable cardinal. However, neither of these results show how to force (with side conditions together with another finite set of objects) the existence of such a large object together with the continuum being small. In this talk we will discuss new results in this area. This is joint work with John Krueger.

Tuesday, March 29 at 4:00 PM in SEO 427
