Logic in Southern California
Caltech
Saturday, February 20, 2016
2:00 - 6:00 pm
Sloan room 151
Funded by NSF grant DMS-1044150

Schedule:

2:00-3:00 Martino Lupini (Caltech)
3:15-4:15 Geoff Galgon (UCI)
4:15-5:00 Coffee Break
5:00-6:00 Spencer Unger (UCLA)

Abstracts:

Martino Lupini
Title: Weak equivalence of actions and first order logic
Abstract: I will present a model-theoretic perspective on the notion of weak equivalence for actions on the standard probability space. I will explain how this perspective allows one to recover some known results about the space of weak equivalence classes, and at the same time establish their noncommutative analogs. This is joint work with Peter Burton.

Geoff Galgon
Title: Perfect and Scattered Subsets of \(2^\omega\setminus\{\kappa\}\) and \(\mathcal{P}_\omega(\kappa)\setminus\lambda\), with an Application to Almost Disjoint Refinements
Abstract: The topological notions of perfectness and scatteredness can be generalized in several ways to spaces like \(\kappa^\omega\setminus\{\kappa\}\), \(2^\omega\setminus\{\kappa\}\), and \(\mathcal{P}_\omega(\kappa)\setminus\lambda\). We present one possible way of doing this, and show as an application how the consistency of a Cantor-Bendixon-like dichotomy for closed subsets of \(\kappa^\omega\setminus\{\kappa\}\) can be used to prove that in generic extensions by a broad class of forcings, there is an almost disjoint refinement of the ground model's \(\kappa\)-sized subsets of \(\kappa\).

Spencer Unger
Title: Successive failures of weak square and the failure of SCH
Abstract: We are motivated by the question "Can one construct a kappa-Aronszajn tree for some kappa > aleph_1 in ZFC?" Towards a negative answer, we prove the following theorem: From large cardinals it is consistent that aleph_1(omega^2) is strong limit and there are no special kappa-Aronszajn trees for any regular kappa in the interval \([aleph_2, aleph_1(omega^2)+2])

Directions and Parking:

Address: 1200 E. California Blvd, Pasadena, CA 91125
Take a look at the Caltech campus map

There is free Saturday parking in underground structure #126. Feel free to park in any of the commuter spaces (these are marked by a red line). Talks will be held in Sloan building #37, Room 151 on the ground floor

Organizers:

Alexander Kechris (Caltech), Organizer Information
Itay Neeman (UCLA), Organizer Information
Matthew Foreman (UCI), Organizer Information
Martin Zeman (UCI) Organizer Information

Local Organizers:

Alexander Kechris (Caltech), Organizer Information
Martino Lupini (Caltech) Organizer Information

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