

آگهی سخنرانی منطق ریاضی

Mini Course on Creature Forcing

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سخنرانی اول

(چهارشنبه شانزدهم فروردین ماه ۹۶، ساعت ۱۶ الی ۱۸)

Abstract

We will define creatures and introduce some nomenclature, followed by a general overview of the two main types of creature forcings: Sequences of creatures or trees of creatures. We will review forcing properties such as properness and Axiom A. We examine a warning counterexample that makes the old continuum countable in the extension.

سخنرانی دوم

(پنجشنبه هفدهم فروردین ماه ۹۶، ساعت ۱۴ الی ۱۶)

Abstract

Using some examples, we will study some conditions that guarantee that a creature forcing is proper. Important strengthenings of properness are almost ω -boundedness that guarantees that the old reals remain unbounded, and ω -boundedness under which the old reals remain a dominating family.

سخنرانی سوم

(شنبه نوزدهم فروردین ماه ۹۶، ساعت ۱۴ الی ۱۶)

Abstract

In order to achieve relative consistency results, iterations and products of forcings are often used. The proof that some invariant is large after the iteration often utilises reflection and density arguments. Typically the harder part of the work is to show that certain invariants remain small in the forcing extension. We will prove a preservation theorem for a successor step and a limit step.

سخنرانی چهارم

(یکشنبه بیستم فروردین ماه ۹۶، ساعت ۹ الی ۱۱)

Abstract

An example of a tree creature forcing with uncountable reservoirs will be provided. The forcing adds reals and specialises a given Aronszajn tree by countable approximations. We will sketch the main steps of the properness proof that uses combinatorics of the classical Baire space together with combinatorics in ω_1 and its powerset.

سخنرانی پنجم

(دوشنبه بیست و یکم فروردین ماه ۹۶، ساعت ۱۴ الی ۱۶)

Abstract

We will show that some linear creature forcings have good Ramsey-theoretic properties. In addition, we will explain the pure decision property. Particular ultrafilters will be used in the definitions of forcing notions and other ultrafilters will be preserved.

مکان: میدان شهید باهنر، پژوهشگاه دانش‌های بنیادی
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