## سمينار هفتكي منطق رياضي

(يائيز ۱۳۹۴)

 ۲۰ الی ۲۴ مهر ۹۴ کنفرانس نظریه مجموعه ها و نظریه مدل جهت دریافت اطلاعات بیشتر به سایت کنفرانس مراجعه نمایید.

Continuation of "Metric model theory of operator algebras" 94,7,7° نازنین روشندل توانا، دانشگاه صنعتی امیرکبیر و پژوهشگاه دانشهای بنیادی

Some topics in generalized descriptive set theory 94,1,71, 11, 2 زانيار قادرنژاد،

بژوهشگاه دانشهای بنیادی

Abstract

In this talk we will cover some parts of "Generalized Descriptive Set Theory and Classification Theory" by Friedman-Hyttinen-Kulikov.

Generalizing Godel's first and second incompleteness theorems for nonrecursively enumerable theories

94,9,41

پیام سراجی، دانشگاه تبریز

Abstract

In this talk we prove that if the set of axioms of a theory is  $\Sigma_n$ -definable, and T is  $\Sigma_{n-1}$ -sound (or (n-1)-consistent), then there is a  $\Pi_n$  sentence which is undecidable in T. For  $n \geq 3$ , the proofs which use n-consistency are not constructive but proofs using  $\Sigma_n$ -soundness are constructive. For the second incompleteness theorem we prove this result: If T is  $\Sigma_n$ -definable and  $\Sigma_{n-1}$ -sound, then it cannot prove  $\Sigma_{n-1}$ -soundness of itself. It is also showed that this result is optimum, in a scene, by constructing a  $\Sigma_n$ -definable and  $\Sigma_{n-2}$ -sound theory which proves  $\Sigma_{n-1}$ -soundness of itself.

> Model theory in abstract elementary classes Andrés Villaveces Universidad Nacional de Colombia يكشنبه ساعت ١٥ الى ١٢ 94,9,1 94,9,4

سه شنبه دانشگاه صنعتی امیرکبیر، دانشکده ریاضی ساعت ۱۳ الی ۱۵ چهارشنبه ساعت ۱۳ الی ۱۵ چهارشنبه ساعت ۱۰ الی ۱۲ یکشنبه دانشگاه صنعتی امیرکبیر، دانشکده ریاضی ساعت ۱۰ الی ۱۲ یکشنبه دانشگاه 94,9,1

Stability theory for first order logic developed very quickly after 1970, prompted by the work of Morley, Lachlan, Baldwin, Shelah and Lascar, among others. Earlier on, model theory of infinitary logics, generalized quantifiers had been started (Keisler, Mostowski) but its stability theory was for a long time postponed. Around 25 years ago, a synthesis of many of these logics started, with semantic rather than syntactic emphasis, with focus on the classes of models rather than on the logics axiomatizing them. This synthesis, started by Shelah, is Abstract Elementary Classes. What followed was the development of a very rich and structural stability theory for these classes. Recently, the emphasis has gone back to the interplay with many logics, on the one hand, and with category theory, on the other hand.

> Differentiation in Logical Form 94,9,78 مهرداد ملکی، پژوهشگاه دانشهای بنیادی

Abstract

We develop point-free derivative of a real-valued Lipschitz function on  $\mathbb{R}^n$ . We construct a duality between real-valued Lipschitz functions and Lipschitzian approximable mapping between corresponding information systems. We show that properties of the Clark gradient are also hold in this context. At the end we introduce some applications of it in Computer Science. This is a joint work with Professor Abbas Edalat.

زمان: پنج شنبه ها ساعت ۱۴ الی ۱۶ مکان: میدان شهید باهنر، پژوهشگاه دانشهای بنیادی سالن شماره ۱