СЕМИНАР "АЛГЕБРА И ЛОГИКА"

Драги колеги, Следващото заседание на семинара ще се проведе на 7 ноември 2014 г. (петък) от 11:00 часа в зала 578 на ИМИ – БАН. Доклад на тема

On a hitherto unexploited nonstandard extension of the finitary standpoint

ще изнесе

Prof. Sam Sanders Ghent University, Белгия.

Поканват се всички желаещи.

От секция "Алгебра и логика" на ИМИ – БАН http://www.math.bas.bg/algebra/seminarAiL/

Abstract

The primitive recursive functions are the class of number-theoretic functions obtained by dropping "unbounded search" from the definition of recursion. This class forms a strict subclass of the recursive functions definable in Peano Arithmetic, the usual axiomatization of arithmetic. Goedel famously proved that primitive recursion *in all finite types* exactly captures the recursive functions definable in Peano Arithmetic, i.e. extending primitive recursion to a larger class of objects yields a much larger class of recursive functions. Now, the bar recursive functionals form a strict extension of the primitive recursive functionals in all finite types, and it is a natural question if one can capture bar recursion by extending primitive recursion to a larger class of objects. In this talk, we show that primitive recursion in all finite types *with nonstandard number parameters* captures bar recursion.