

Faculdade de Ciências da Universidade de Lisboa
cmafcio@fc.ul.pt Tel. (+351) 21 750 00 27

SEMINÁRIO DE LÓGICA MATEMÁTICA

Dia 7 de Abril (quinta-feira), às 15H00, na sala 6.2.33

Complete arithmetical solids and nonstandard analysis

Imme Van Den Berg
(Universidade de Évora)

Abstract:

Together with Bruno Dinis we developed an axiomatics for the external numbers of nonstandard analysis. The axioms are similar to, but somewhat weaker than the axioms for the real numbers and deal with algebraic rules, Dedekind completeness and the Archimedean property. A structure satisfying these axioms is called a complete arithmetical solid. We show that such a structure must have a built-in nonstandard model for the real number system.

*Seminário financiado por Fundos Nacionais através da FCT – Fundação para a Ciência e a Tecnologia
no âmbito do projeto UID/MAT/04561/2013*