



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

## SEMINÁRIO DE LÓGICA MATEMÁTICA

Dia 14 de Janeiro (segunda-feira), sala 6.2.33 às 16:00

## Type-2 computability with applications to differential equations

**Daniel Graça** (Universidade do Algarve)

## Abstract:

Local: FCUL, C6 - Piso 2, 6.2.33

Classical computability theory is usually developed over countable structures. However, in many applications one is interested in computability over non-countable structures, such as the set of real numbers. Type-2 computability (also known as computable analysis) is an extension to classical (type-1) computability theory which addresses such concerns. Here we will review some basic definitions and results of type-2 computability. We will then apply type-2 computability theory to the study of several problems involving differential equations.

Seminário financiado por Fundos Nacionais através da FCT – Fundação para a Ciência e a Tecnologia no âmbito do projeto UID/MAT/04561/2019



