

# 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

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### Abstract:

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.

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