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## SEMINÁRIO DE LÓGICA MATEMÁTICA

Dia 27 de Outubro (sexta-feira), sala 6.2.33, às 15:00

## An introduction to logics with probability operators

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Abstract:

The problems of representing, and working with, uncertain knowledge are ancient problems dating, at least, from Leibnitz. In the last decades there is a growing interest in the field connected with applications to computer science and artificial intelligence. Researchers from those areas have studied uncertain reasoning using different methods. Some of the proposed formalisms for handling uncertain knowledge are based on logics with probability operators. The aim of this presentation is to provide an introduction to such formal systems. The main focus is related to mathematical techniques for infinitary probability logics used to obtain results about proof-theoretical and model-theoretical issues: axiomatizations, completeness, compactness, decidability.

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