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SEMINÁRIO DE LÓGICA MATEMÁTICA

Dia 2 de Junho (quinta-feira), às 15H00, na sala 6.2.33

Many-Sorted Equivalence of Shiny and Strongly Polite Theories

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Abstract:

The Nelson-Oppen method allows the modular combination of quantifier-free satisfiability procedures of first-order theories into a quantifier-free satisfiability procedure for the union of the theories provided that these theories satisfy some conditions. In this talk, we will present the Nelson-Oppen techniques for stably infinite, shiny and strongly polite theories, and analyse the relationship between shiny and strongly polite theories in the many-sorted case. We show that, for theories with a decidable quantifier-free satisfiability problem, the set of many-sorted shiny theories coincides with the set of many-sorted strongly polite theories. Capitalizing on this equivalence, we obtain a Nelson-Oppen combination theorem for many-sorted shiny theories. Joint work with João Rasga.

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