

Mês de: **MARÇO 2014**

## SEMINÁRIO DE LÓGICA MATEMÁTICA

**Dia 20 de Março (quinta-feira), às 15 horas, na Sala B3-01**

Automating deduction in non-classical logics: Signed resolution  
for many-valued logics

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**Abstract:**

Automating deduction in non-classical logics is today a major objective, given their many fundamental and practical applications. This is particularly so with respect to many-valued logics, logical systems with truth-value sets with cardinality  $> 2$ .

Adapting well-known automated deduction calculi for classical logic has proved to be an efficient way to automate deduction in non-classical logics. In this talk, I show that the resolution calculus combined with the formalism known as signed logic, i.e., signed resolution, is an adequate calculus for automating deduction in (mostly finitely) many-valued logics.

There being the time and the inclination, possible ways to implement signed resolution in resolution-based ATP (automated theorem proving) software may be discussed.

