SEMINÁRIO
LÓGICA MATEMÁTICA

10 de Fevereiro | 16h00 | sala 6.2.33

Fregean variables

Bruno Jacinto
(Faculdade de Ciências, Universidade de Lisboa)

Abstract:
According to Frege, variables are punctuation marks. They have no meaning. In particular, variables neither refer arbitrarily nor have as their semantic values objects with the property of being arbitrary.
The Fregean development of the view that variables are meaningless into a semantic theory for first-order languages is known to be inconsistent with the compositionality of first-order languages. Recently, Wehmeier (2018) proposed an alternative semantic theory that is both compositional and consistent with the view that variables have no meaning. Yet, as observed by Pickel and Rabern (unpublished), Wehmeier's theory has implausible commitments.
These ultimately result from the fact that Wehmeier's account of the semantics of individual constants is akin to the Tarskian account of the semantics of variables.
A plausible compositional semantic theory for first-order languages on which variables are meaningless thus remains to be developed. The main aim of this talk is to propose and defend such a semantic theory, the Fregean variables theory. The Fregean variables theory is characterised by the three following claims:
1) in general, expressions of first-order languages are context-dependent;
2) there is no one semantic operation that corresponds to the formation rule for atomic formulae;
3) formulae have as their semantic values entities of a kind that constitutes a generalisation of the Russellian notion of a propositional function. It is also shown in the presentation that the Fregean variables theory is both compositional and consistent with further data on the semantics of first-order languages.