MME Seminar 2019

Date: 14th March 2019 (Thursday)
Time: 3.00 p.m.
Venue: MME Journal Rm (NIE7-3-16)

Why develop mathematics in a two-level foundation?

By Maria Emilia Maietti

Abstract

We motivate the need of founding mathematics, and in particular constructive mathematics, in a two-level system as that advocated in my 2009 work "A minimalist two-level foundation for constructive mathematics". In our notion of foundation, the language of type theory, that of category theory and the usual one of axiomatic set theory used in everyday practice of mathematics play a relevant role. This will be shown by providing suitable examples of foundations including the Minimalist Foundation (for short, MF) ideated with Giovanni Sambin from an earlier work in 2005, and completed in 2009. We will conclude by describing the key peculiarities of MF in relation to the representation of Continuum and its compatibility with classical predicative foundations.

Maria Emilia Maietti is Associate Professor in Mathematical Logic at the Department of Mathematics, University of Padova, Italy. Her research interests include foundation and development of constructive mathematics, type theory and categorical logic.

All are welcome!