



Speaker: Alexandru Buium
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2:00 PM
258 Hurley Hall

Title: Semantic aspects of the second formalization

Abstract:

We start with the question of identifying the minimum amount of ontological commitment that is necessary to introduce mathematics; this minimum corresponds to a rather radical variety of nominalism. Next we revisit the construction of pre-mathematical logic, and then of mathematical logic, from this nominalist standpoint: one is led to a first formalization, and then to a second formalization, respectively. That this revisiting can be done in principle is more or less clear. But if one actually carries out this program in practice one is led to some surprising consequences: in particular one can argue that, in a certain precise technical sense, mathematical logic cannot possibly have mathematics itself as a referent.