



SEMINÁRIO

LÓGICA MATEMÁTICA

19 de janeiro 2024 | 16:00 | sala 6.2.33

Choice in the Iterative Conception

Bruno Jacinto & Beatriz Souza
(Universidade de Lisboa)

ABSTRACT:

The iterative conception is arguably the best worked out conception of set available. What is the status of the Axiom of Choice, presumably the most controversial of ZFC's axioms, under this conception? Boolos argues that the iterative conception doesn't justify Choice. We show that Boolos's argument overgenerates. For, if cogent, it would also imply -- contrary to what Boolos advocates -- that the axioms of Pairing, Union, Separation and Powerset are not justified by the iterative conception. In addition, we offer a plural formulation of Boolos's stage theory (a formalization of the iterative conception) and show that prima facie plausible principles of the logic of plurals imply, together with plural stage theory, Choice as well as Pairing, Union, Separation and Powerset.

CMAF **IO**