

**MR2911183 (Review)** 03A05 03D10 03F30

**de Araújo, Anderson** (BR-ECP-TAL); **Carnielli, Walter** (BR-ECP-TAL)

**Non-standard numbers: a semantic obstacle for modelling arithmetical reasoning.** (English summary)

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The paper discusses some possible philosophical interpretations of some results of the first author [“Turing computability and nonstandard models of arithmetic”; per bibl.] (note that this paper did not in fact appear in [*Programs, proofs, processes*, Lecture Notes in Comput. Sci., 6158, Springer, Berlin, 2010; [MR2797118 \(2012c:68011\)](#)]). Technically, there are two proofs in the paper (which are not new) and two (also old) theorems without proofs (which can be found in Araújo’s paper). The overall theme is that we cannot fully comprehend computation theory because there exist some non-standard Turing machines. *Saeed Salehi*

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