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The law of excluded middle in the simplicial model of type theory. (English) [Zbl 07250002] Theory Appl. Categ. 35, 1546-1548 (2020).

Since [the authors, “The simplicial model of univalent foundations (after Voevodsky)”, Preprint, arXiv: 1211.2851] in 2012, it has been wondered whether Voevodsky’s model of type theory in simplicial sets validates the law of excluded model. This paper answers it affirmatively, so that excluded middle is compatible with univalence.

Reviewer: Hirokazu Nishimura (Tsukuba)

**MSC:**

- 03B15 Higher-order logic; type theory (MSC2010)  
55U10 Simplicial sets and complexes in algebraic topology  
18C50 Categorical semantics of formal languages

**Keywords:**

univalent foundations; homotopy type theory; simplicial sets; law of excluded middle; dependent type theory

**Full Text:** [Link](#)

**References:**

- [1] URL:<http://mat.uab.cat/~kock/crm/hocat/advanced-course/Quadern47.pdf>.

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