

Lack, Stephen

A Quillen model structure for 2-categories. (English) Zbl 1017.18005
K-Theory 26, No. 2, 171-205 (2002).

The author describes a Quillen model structure on the category of small 2-categories and 2-functors. The author's work is closely related to the already known model structure on the category of small 2-groupoids and 2-functors. Fibration and weak equivalence are presented in generalized form. Cofibration appears slightly different.

The paper contains many interesting examples. The exposition is clear and careful. The paper contributes interesting techniques for further research.

Reviewer: [Akrur Behera \(Rourkela\)](#)

MSC:

18D05 Double categories, 2-categories, bicategories and generalizations (MSC2010)

55U35 Abstract and axiomatic homotopy theory in algebraic topology

18G55 Nonabelian homotopical algebra (MSC2010)

Cited in **3** Reviews
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Keywords:

[Quillen model category](#); [Gray tensor product](#); [bi-equivalence](#); [2-categories](#)

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