

Schwede, Stefan

Stable homotopy of algebraic theories. (English) Zbl 0964.55017
Topology 40, No. 1, 1-41 (2001).

By [the author, J. Pure Appl. Algebra 120, No. 1, 77-104 (1997; [Zbl 0888.55010](#))] the stable homotopy theory of commutative simplicial algebras over a \mathbb{Q} -algebra B is equivalent to the homotopy theory of simplicial B -modules.

The paper shows that the stable homotopy theory of an algebraic theory is completely determined by an associated ring spectrum. For the theory of commutative algebras this ring spectrum is related to André-Quillen homology via some spectral sequences. An equivalence of the (co-)homology of an algebraic theory with the topological Hochschild (co-)homology of the associated ring spectrum is established.

Reviewer: [Marek Golasinski \(Toruń\)](#)

MSC:

[55U35](#) Abstract and axiomatic homotopy theory in algebraic topology
[18C10](#) Theories (e.g., algebraic theories), structure, and semantics

Cited in **1** Review
Cited in **27** Documents

Keywords:

[algebraic theory](#); [André-Quillen homology](#); [ring spectrum](#); [simplicial theory](#); [stable homotopy theory](#); [topological Hochschild homology](#)

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