

**Schwede, Stefan****The  $n$ -order of algebraic triangulated categories.** (English) Zbl 1285.18018  
J. Topol. 6, No. 4, 857-867 (2013).

Let  $\mathcal{T}$  be a triangulated category and let  $n$  be a positive integer. The  $n$ -order of  $\mathcal{T}$  is an invariant whose value is a positive integer or infinity. It measures the strength of the relation  $n \cdot (Y/n)$  for objects  $Y$  in  $\mathcal{T}$ , where  $Y/n$  is the cone of multiplication by  $n$  in  $Y$ . If  $\mathcal{T}$  is obtained from chain complexes in an additive category (that is, if  $\mathcal{T}$  is an algebraic triangulated category), then the  $n$ -order of  $\mathcal{T}$  is infinite for all  $n$ . But the  $p$ -local stable homotopy category for a prime number  $p$  has  $p$ -order  $p - 1$  and is therefore not algebraic.

Reviewer: [Richard John Steiner \(Glasgow\)](#)**MSC:****18E30** Derived categories, triangulated categories (MSC2010)  
**55P42** Stable homotopy theory, spectraCited in **5** Documents**Keywords:**triangulated category;  $n$ -order; algebraic triangulated category;  $p$ -local stable homotopy category**Full Text:** [DOI](#) [arXiv](#)