Oberseminar Topologie: 13.05.2019

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„Spectral Lie algebras as models for unstable v_n-periodic homotopy theory.“

Abstract:
I will first review some recent work that generalizes Quillen's rational homotopy theory to the v_n-periodic localizations of unstable homotopy theory (rational being the case n=0). The results provide a model for such localizations in terms of algebras for the spectral Lie operad of Salvatore and Ching. In good cases, the resulting Lie algebras can be calculated using work of Behrens-Rezk that relates these models to topological André-Quillen homology. Until recently however, little was known about the class of spaces which are "good" in this sense. I will discuss ongoing joint work with Brantner, Hahn, and Yuan that produces a large class of examples, including all H-spaces.