ACCESSIBLE INFINITY-COSMOI

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Riehl and Verity introduced infinity-cosmoi - certain simplicially enriched categories - as a framework in which to give a model-independent approach to infinity categories. For instance, there is an infinity cosmos of infinity-categories with finite limits or colimits, or of cartesian fibrations. In this talk, I will introduce the notion of an accessible infinity-cosmos and explain that most, if not all, infinity-cosmoi arising in practise are accessible. Applying results of earlier work, it follows that accessible infinity-cosmoi have homotopy weighted colimits and admit a broadly applicable homotopical adjoint functor theorem. This is a report on joint work with Steve Lack, and builds on recent work with Lack and Lukáš Vokřínek.