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### *Accessible functors and inaccessible cardinals*

The Grothendieck–Verdier universe axiom asserts that every set is a member of some set-theoretic universe  $\mathbf{U}$  that is itself a set. One can then work with entities like the category of all  $\mathbf{U}$ -sets or even the category of all locally  $\mathbf{U}$ -small categories, where  $\mathbf{U}$  is an “arbitrary but fixed” universe, all without worrying about which set-theoretic operations one may legitimately apply to these entities. Unfortunately, as soon as one allows the possibility of changing  $\mathbf{U}$ , one also has to face the fact that universal constructions such as limits or adjoints or Kan extensions could, in principle, depend on the parameter  $\mathbf{U}$ . The purpose of this talk is to explain how one can prove that this is *not* the case, at least in the case of adjoints for accessible functors between locally presentable categories (and hence, limits and Kan extensions), making explicit the idea that “bounded” constructions should not depend on the choice of  $\mathbf{U}$ .