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## **Non-Invertible Symmetries in $d > 2$**

### Abstract

In this talk I will review some recent progress in the study of non-invertible symmetries in dimensions  $d > 2$ . After introducing known constructions and describing how they lead to constraints on RG flows, I will discuss how non-invertible symmetries can also be used to obtain new RG flows. This involves the notion of “non-invertible twisted compactification,” which can be used to construct e. g. novel 3d  $N=6$  theories from 4d  $N=4$  SYM. Finally, I will describe upcoming work in which we give a partial criterion for determining whether a given non-invertible symmetry is “intrinsically non-invertible”, or whether it can be recast (in an appropriate sense) as a standard invertible symmetry with an anomaly.