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## Generalized Global Symmetries in QFTs Via String Compactifications

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An understanding of generalized global symmetries of a Quantum Field Theory (QFT) can provide deep insight into its strong coupling behavior. For example, spontaneous non-breaking of 1-form symmetry signals confinement. Standard tools for studying generalized global symmetries often rely on the existence of a Lagrangian description, and hence only apply to weakly coupled QFTs. However, all the known QFTs in five and six dimensions are inherently strongly coupled. In this talk, I will describe how the generalized global symmetries of 5d and 6d QFTs are encoded in their construction as a compactification of M/F-theory. I will not only discuss higher-form symmetries, but also higher-group structures mixing the higher-form symmetries.

### Type of contribution

Contributed Talk only

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