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Kursat Sozer* (ksozer@indiana.edu). *Extended HQFTs in dimension 2.*

Topological quantum field theories (TQFTs), inspired by theoretical physics, produce manifold invariants behaving well under gluing. For every discrete group G , homotopy quantum field theories (HQFTs) are G -equivariant versions of TQFTs. In this talk, we define and classify 2-dimensional extended HQFTs generalizing methods introduced for TQFTs by Chris Schommer-Pries in 2009. We list generators and relations for the extended G -equivariant bordism bicategory and use them to classify 2-dimensional extended HQFTs. (Received August 19, 2019)