

Extended Frobenius algebras and unoriented 2-TQFTs

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A classical result in quantum topology is that oriented 2-dimensional topological quantum field theories (2-TQFTs) are fully classified by commutative Frobenius algebras. In 2006, Turaev and Turner introduced extended Frobenius algebras, which are commutative Frobenius algebras with additional structure, to classify unoriented 2-TQFTs. In this talk, we will explore the relation between (extended) Frobenius algebras and (unoriented) TQFTs, and look at some examples, classification results, and general constructions of extended Frobenius algebras.

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