

Abstract

Title: Turaev-Viro construction of unoriented 3d TFTs

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This poster will present a construction of unoriented 3d TQFTs in terms of the data of a "twisted" spherical fusion category. It is an extension of a well-known construction (due to Turaev and Viro) of oriented 3d TQFTs which was written in terms of the data of a spherical fusion category. From the condensed matter point of view, it can be viewed as a construction of bosonic gapped phases of matter with time-reversal symmetry.