

Modular categories and (extended) topological field theories

Alexei Davydov

It is believed that 3d Topological Field Theories (TFTs) associated with modular categories (in the sense of Turaev) extend to functors between bicategory of cobordism and 2-category of “2-vector spaces”. We will explain how it works in the case of Dijkgraaf-Witten gauge TFT with a finite gauge group.