
THEO JOHNSON-FREYD, Dalhousie University and Perimeter Institute

Classification of topological orders

Topological orders have a mathematical axiomatization in terms of their higher fusion categories of extended operators; the characterizing property of these higher fusion categories is that they satisfy a nondegeneracy condition. After overviewing some of the higher category theory that goes into this axiomatization, I will describe what we do and don't know about the classification of topological orders in various dimensions.