

# LURIE'S TOPOLOGICAL QUANTUM FIELD THEORY II

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Recently, Jacob Lurie announced his joint work with Mike Hopkins, where they generalized the classical Atiyah's topological quantum field theory using the higher category theory. In this new framework, they proved a generalization of the Galatius-Madsen-Tilman-Weiss cobordism hypothesis theorem, which generalized the Madsen-Weiss theorem concerning the classifying space of surface diffeomorphisms.

In this talk, I shall summarize some ideas of their proof. Although this talk is a sequel to my first review delivered at the RIMS workshop "Transformation groups from a new viewpoint" back in August, 2009, I shall summarize the contents presented there at the beginning of my talk.

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