

Topological Membranes with 3-Form H Flux on Generalized Geometries

*Department of Mathematical Sciences, Ritsumeikan University
and Yukawa Institute for Theoretical Physics*

Noriaki Ikeda and Tatsuya Tokunaga

E-mail: ikeda@yukawa.kyoto-u.ac.jp, tokunaga@yukawa.kyoto-u.ac.jp

Our talk was based on our study: [hep-th/0609098](https://arxiv.org/abs/hep-th/0609098). In the paper, we construct topological string and topological membrane actions with a nontrivial 3-form flux H in arbitrary dimensions. These models realize Bianchi identities with a nontrivial H flux as consistency conditions. Especially, we discuss the models with a generalized $SU(3)$ structure, a generalized G_2 structure and a generalized $Spin(7)$ structure. These models are constructed from the AKSZ formulation of Batalin-Vilkovisky formalism.