## 1127-18-345 Yu Tsumura\* (tsumura.2@osu.edu), 231 W. 18th Ave., MW 400, Columbus, OH 43210, and Thomas Kerler and Yilong Wang. The coend and the dihedral type subcategory of a metaplectic category.

A metaplectic modular category is a unitary modular category with the same fusion rules as  $SO(N)_2$  for some odd N > 1. A metaplectic category contains a subfusion category  $\mathcal{D}$  whose fusion rules are the same as the representation of the dihedral group of order 2N.

A key ingredient to construct topological invariants from a modular category is the coend. The coend of  $SO(N)_2$ is a braided Hopf algebra that is in fact an object in the subcategory  $\mathcal{D}$ . In the talk, I talk about our research on the subcategory  $\mathcal{D}$  and the coend. This is a joint work with Thomas Kerler and Yilong Wang. (Received February 06, 2017)