1138-18-193   **Eric Carson Rowell***, rowell@math.tamu.edu. *Metaplectic Modular Categories, Gauging and Property F.* Preliminary report.

Metaplectic modular categories, unitary modular categories with the same fusion rules as $SO(N)_2$ for some N, are some of the best weakly integral categories that we know of. I will describe the classification and enumeration of these amazing categories in terms of gauging and discuss the images of the corresponding braid group representations. In the case that $8 \mid N$ these categories seem to fit into a sequence of $\mathbb{Z}_2$-gaugings, and I will discuss preliminary results in this direction. Various parts of the talk will be based on joint work with terrific co-authors including Plavnik, Wang, Bruillard, Wenzl, Ruan, Gustafson, Wenzl, Ardonne and Cheng. (Received February 09, 2018)