1125-18-950 Scott Morrison and David Penneys* (penneys.2@osu.edu), 100 Math Tower, 231 West 18th Avenue, Columbus, OH 43210-1174. Tensor categories enriched in braided tensor categories.

Fusion categories generalize the representation categories of quantum groups, and thus we think of fusion categories as objects which encode quantum symmetry. Recently, there has been a lot of interest in super fusion categories, which are enriched in super vector spaces. These objects are examples of tensor categories enriched in symmetric tensor categories. In this talk, I'll discuss an ongoing project with Morrison in which we study tensor categories enriched in a braided fusion category V, which is not assumed to be symmetric. We classify V-fusion categories in terms of oplax braided tensor functors from V to the centers of ordinary fusion categories. Under this correspondence, strong braided tensor functors correspond to V-complete V-fusion categories. (Received September 13, 2016)