

Josh Edge

~~University of Indiana~~
Indiana University

Classification of some small braidings of non-planar trivalent categories.

In this talk, we extend the work of Morrison, Peters, and Snyder (2015) in which they classified among other things, all braidings on (planar) trivalent categories. We will discuss all braidings on so-called "non-planar" trivalent categories. To do this, we will first classify all skein theories generated by \times , \diagdown , and \diagup of which only one interesting braiding appears (on $\text{Rep}(O_2)$). Using this result, we can then classify all non-planar trivalent categories with a braiding.