Hopf25

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Functors from Bicrossed Fusion Categories

The study of fusion categories is young and a problem at the forefront of the field is to develop a robust catalog of examples on which to test our intuition. Last year, M. Muller, J. Plavnik, and H. Peña Polastri introduced a new construction of fusion categories called the bicrossed product. This work has allowed for the definition of a class of fusion categories which we wish to better understand. As Yoneda introduced into category-theoretic folklore, to understand one mathematical object is equivalent to understanding its relation to others. So, in this talk, we will aim to learn more about these categories by giving a classification of functors out of bicrossed fusion categories. Further, this classification allows us to describe fiber functors and module categories over bicrossed products of fusion categories. The content of this talk is based on joint work with Monique Müller, Héctor Peña Pollastri, and Julia Plavnik.