1163-18-1364 **Dmitri Nikshych*** (`dmitri.nikshych@unh.edu`), Department of Mathematics and Statistics, University of New Hampshire, Durham, NH 03824. *On minimal extensions of symmetric fusion categories.* Preliminary report.

A *minimal extension* of a symmetric fusion category $\mathcal{E}$ is a non-degenerate braided fusion category $\mathcal{C}$ such that $\dim(\mathcal{C}) = \dim(\mathcal{E})^2$ together with an embedding $\mathcal{E} \hookrightarrow \mathcal{C}$. Lan, Kong, and Wen observed that minimal extensions of $\mathcal{E}$ form a group $\mathbf{Mext}(\mathcal{E})$. Minimal extensions of Tannakian categories are well understood. Namely, for a finite group G, one has $\mathbf{Mext}(\mathsf{Rep}(G)) = H^3(G, \mathbb{C}^\times)$ and minimal extensions are the twisted group doubles $\mathsf{Rep}(D^\omega(G))$. An interesting open problem is to compute $\mathbf{Mext}(\mathcal{E})$ for a super-Tannakian category $\mathcal{E}$. In this talk, I will explain how one can use the theory of graded braided extensions to compute this group for a pointed super-Tannakian $\mathcal{E}$. This is based on joint work with Alexei Davydov. (Received September 15, 2020)

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