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Alex Levin and **Dmitri Nikshych*** (dmitri.nikshych@unh.edu), Department of Mathematics and Statistics, Kingsbury Hall, 33 Academic Way, Durham, NH 03861. *On the subcategory lattices of fusion categories*. Preliminary report.

Given a fusion category \mathcal{C} we describe the lattices of fusion subcategories of its equivariantizations and graded extensions by finite groups in terms of subcategories of \mathcal{C} and certain group-theoretical data. Combining these we determine the subcategory lattice of a braided fusion category obtained by gauging. As an example, we describe this lattice of an arbitrary weakly group-theoretical braided fusion category in terms of its core. This extends the previously known results about the subcategory lattice of the representation category of a twisted group double. (Received September 21, 2018)