CATEGORIFICATION OF $\mathbb{Z}$-MODULAR DATA ASSOCIATED WITH COMPLEX REFLECTION GROUPS

ABEL LACABANNE

Abstract:
The aim of this talk is to introduce the notion of a $\mathbb{Z}$-modular datum, how to categorify them and to give some examples associated with families of unipotent characters of complex reflection groups. We will explain how slightly degenerate categories naturally gives rise to a $\mathbb{Z}$-modular datum, and relate this notion to non-degenerate supercategories which can be thought as a categorification of a $\mathbb{Z}$-modular datum. We will finally give examples of such categories, by giving a categorification of a $\mathbb{Z}$-modular datum associated with the complex reflection group $G(d, 1, n(n+1)/2)$ by constructing a braided fusion category from representations of a quantum group at a root of unity.