1138-18-227   **Kenichi Shimizu*** (`kshimizu@shibaura-it.ac.jp`), Department of Mathematical Sciences, Shibaura Institute of Technology, 307 Fukasaku, Minuma-ku, Saitama, 337-8570, Japan. *Class functions of tensor categories.*

By generalizing the well-known notion of class functions of a group, one can define the space of class functions of finite tensor categories. In the recent study of tensor categories and its applications to CFT and TQFT, it is important to study the space of class functions. For example, if $\mathcal{C}$ is a modular tensor category (in the sense of Lyubashenko), then the modular group $\mathrm{SL}_2(\mathbb{Z})$ acts projectively on the space of class functions of $\mathcal{C}$. In this talk, I will review recent results on the structure of the space of class functions and its relation to the higher Reynolds ideals. I will also give several computational examples. (Received February 10, 2018)