Seminarankündigung

Deformationsquantisierung

Am 19. 6. 2020 spricht um 14 Uhr c.t.

`https://bbb.durates.net/b/ste-2va-uez`

Andreas Drotloff

Modular tensor categories and $\mathrm{SL}_2(\mathbb{Z})$

The modular group $\mathrm{SL}_2(\mathbb{Z})$ has a well known connection to surface theory as the mapping class group of the torus. But it also makes an appearence in the study of tensor categories, more precisely in the special case of modular tensor categories (MTC). This may seem surprising at first, but it can be explained by the fact that Modular tensor categories provide a way to classify extended 3-dimensional topological field theories via a construction given by Reshetikhin and Turaev. In this talk, we will discuss monoidal categories and introduce various additional structures like duality and braiding. These will enable us to state the definition of an MTC and examine how every MTC gives a projective representation of $\mathrm{SL}_2(\mathbb{Z})$.

gez. Stefan Waldmann