Contribution ID: **16** Type: **not specified**

From topological field theories to "higher"algebra.. and back?

Thursday 12 April 2018 11:15 (1h 15m)

We will start this talk with an introduction to the Atiyah-Segal approach to topological field theories. This will be a recollection from Ulrike Tillmann's talk. We will then take a different direction and see how this approach led to developments of so-called higher algebra and higher categories in mathematics. We will see how a classification of so called "fully extended"topological field theories leads to studying algebraic "dualizability" conditions, generalizing a finite dimensional vector space and its dual. The study of these conditions has lead to many interesting connections to different fields of mathematics, e.g. in representation theory.

Presenter: SCHEIMBAUER, Claudia