Universität Hamburg
DER FORSCHUNG | DER LEHRE | DER BILDUNG

Fakultät für
Mathematik, Informatik
und Naturwissenschaften

Kolloquium über Reine Mathematik

Einladung zu einem Vortrag

Dienstag, 30. Mai 2023

17 Uhr, Geom H4

Prof. Christopher Schommer-Pries
(University Notre Dame, Indiana)

Topological Field Theories and Stable Diffeomorphism

Abstract:

Topological Quantum Field Theories give rise to manifold invariants and it is an interesting philosophical question as to what sort of invariants arise this way. Attempting to answer this question will lead us to connections with representation theory as well as the technique of Mobius inversion. The latter has applications in number theory, combinatorics, and group theory. A generalization of this technique will allow us to prove a positive result, that TQFTs can detect stable diffeomorphism type of manifolds satisfying a certain finiteness condition. No prior experience with TQFTs will be assumed.

Vor dem Vortrag (ab 16.30 Uhr) stehen im Foyer vor Hörsaal H4 Kaffee und Tee bereit.