Universität Hamburg
DER FORSCHUNG | DER LEHRE | DER BILDUNG

Fakultät für Mathematik, Informatik und Naturwissenschaften

Kolloquium über Reine Mathematik

Einladung zu einem Vortrag

Dienstag, 10. Dezember 2019

17 Uhr s.t., Geom H4

Dr. Georg Biedermann
(Universidad del Norte, Kolumbien)

Calculus in Higher Topos Theory

Abstract:

Goodwillie calculus was devised by Thomas G. Goodwillie to understand the difference between algebraic K-theory and topological cyclic homology. It has become an important tool in homotopy theory both computationally and conceptually. Orthogonal calculus was invented by Michael Weiss to study various objects arising from differential topology.

I am going to construct from the data of a higher topos equipped with a left exact localization a tower of left exact localizations which yields the Goodwillie tower and the Weiss tower as special cases. All along I aim to introduce some ideas of higher topos theory. If time permits I want to explain how the Goodwillie tower really is an analogue of the classical Taylor series. This talk reports on joint work with M. Anel, E. Finster and A. Joyal.

Vor dem Vortrag (ab 16.30 Uhr) stehen im Raum 327 Kaffee und Tee bereit.