Universität Hamburg
DER FORSCHUNG | DER LEHRE | DER BILDUNG

Fakultät für
Mathematik, Informatik
und Naturwissenschaften

Kolloquium über Reine Mathematik

Einladung zu einem Vortrag

Dienstag, 12. November 2024

17 Uhr, Geom H4

Prof. Dr. Julian Holstein
(Universität Hamburg)

Curvature, Koszul duality and Calabi-Yau structures

Abstract:

The notion of a differential d such that d^2 = 0 is pervasive in mathematics, giving rise to cohomology and its many applications throughout topology, geometry, number theory and beyond.

I will discuss how in many situations we are naturally led to relax this assumption and introduce curvature into algebra. I will focus in particular on Koszul duality and how differential graded categories can be understood through curved coalgebras. This includes applications to Calabi-Yau structures and their relation to Poincaré duality.

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