Kolloquium über Reine Mathematik

Einladung zu einem Vortrag

Dienstag, 17. Dezember 2024

17 Uhr, Geom H4

Prof. Dr. Claus Hertling (Universität Mannheim)

Title:

F-manifolds and Dubrovin-Frobenius manifolds

Abstract:

Frobenius manifolds were defined in the early 90ies by Dubrovin, as a way to incorporate in a geometric way information from quantum cohomology of closed algebraic manifolds. They became a carrier of mirror symmetry. They also arise in the theory of isolated hypersurface singularities and in the theory of integrable systems. Part of a Frobenius manifold is a multiplication on the holomorphic tangent bundle of a complex manifold. A manifold with this property and an integrability condition is called an F-manifold. The multiplication can be encoded in a subvariety in the cotangent bundle with interesting properties. Enriching an F-manifold to a Frobenius manifold requires existence of some meromorphic connection above the F-manifold. The talk will give an overview on the constructions and classifications of F-manifolds and Frobenius manifolds.

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