



Kolloquium über Reine Mathematik

Einladung zu einem Vortrag

Dienstag, 10. Mai 2022

17 Uhr, Geom H4

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Classification Problems for Vertex Algebras

Abstract:

Vertex (operator) algebras describe 2-dimensional conformal field theories in physics. They were introduced in the 1980s to explain mysterious connections between number and representation theory (monstrous moonshine). Not long ago, they were also shown to capture certain aspects of 4-dimensional superconformal field theories.

In this talk I will describe recent classification results for holomorphic vertex algebras of central charge 24 by means of certain modular forms (vector-valued Eisenstein series). Moreover, I will sketch classification problems arising in the context of 4-dimensional physics.

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