



Kolloquium über Reine Mathematik

Einladung zu einem Vortrag

Dienstag, 28. Juni 2022

17 Uhr, Geom H4

Prof. Terry Gannon
(University of Alberta)

From A-D-E to Jacobians of Fermat curves to ...?

Abstract:

One of the most celebrated results in Conformal Field Theory is the classification by Cappelli-Itzykson-Zuber in 1987 of the conformal field theories with $sl(2)$ symmetry. They found that it falls mysteriously into an A-D-E pattern. A few years later the analogous result for $sl(3)$ was obtained; these have a mysterious connection with Jacobians of Fermat curves. Until recently, very little else was known. The hard part of the problem concerns the possible extensions of the vertex operator algebras coming from Lie algebras. This can be thought of as the nonabelian version of extending lattices. My talk is aimed at nonexperts. It describes the history of the problem, and a recent breakthrough. And it will ask for your help in seeing what comes after A-D-E and Fermat curves!

**Vor dem Vortrag (ab 16.30 Uhr) stehen im Foyer vor Hörsaal H 5
Kaffee und Tee bereit.**