



universität
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Fakultät für Mathematik

Mathematisches Kolloquium

Mittwoch, 27. November 2024

Sky Lounge

EINLADUNG

Tom Mrowka

(Massachusetts Institute of Technology)

„Forty years of Four Manifolds“

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Abstract:

Since the twin breakthroughs in 1982-83 by Freedman and Donaldson the study of four manifolds has been developing rapidly. Freedman's resolution of the 4d topological Poincaré conjecture and refinements combined with Donaldson's surprising applications of the Yang-Mills equations to show that the situation for smooth structures in dimension 4 was more complicated than in higher dimensions. Since then new theories including Seiberg-Witten equations, Ozsvath and Szabó's Heegaard Floer theory, Embedded Contact homology and have led to surprising applications to question in 3 and 4 dimensional topology. This talk will survey some of these developments.

14.45 Uhr: Kaffeejause

15.15 Uhr: Vortrag

vinum cum pane im Anschluss

Vera Vertesi
Radu Ioan Bot