



EINLADUNG

im Rahmen des Seminars für Mathematische Physik

zum Vortrag

von

Thorsten Schimannek

(Univ. Bonn)

über

„Fourfolds, integral Fluxes and Modularity“

Abstract:

Four-dimensional $N=1$ vacua of F-theory are determined by three discrete choices. A topological type of elliptically fibered Calabi-Yau fourfolds, a choice of flux and a minimum of the corresponding scalar potential. While there are several constructions that together provide an abundance of elliptic Calabi-Yaus, the choice of properly quantized flux is in general more involved. The talk will start with a brief review of F-theory and the geometry of Calabi-Yau fourfolds. I will then explain how topological string theory and homological mirror symmetry can be used to determine properly quantized choices for a particular class of fluxes. Additional comments will be about certain Fourier-Mukai transformations that act on the underlying basis of topological branes and lead to modular properties of the Gromov-Witten potentials on non-singular Calabi-Yau fourfolds.

Zeit: Dienstag, 26.6.2018, **13:45**

Ort: **TU Wien**, Freihaus, SEM 136, 10. Stock,
Wiedner Hauptstraße 8-10,

gez.: S. Fredenhagen, D. Grumiller, J. Knapp