



EINLADUNG

im Rahmen Literaturseminars

zum Vortrag

von

Marcus Sperling

(Uni Wien)

über

*„Symplectic Singularities in Physics:
Their Origins and Significance“*

Abstract:

Symplectic singularities, also known as hyper-Kähler singularities, encompass well-known geometric spaces such as the Kleinian surface singularities or the moduli space of instantons. Recently, a new class of symplectic singularities has emerged through the construction based on a physics model known as the 3d $N=4$ Coulomb branch.

In this talk, I aim to provide an introduction and overview of symplectic singularities in general, with a particular focus on the 3d $N=4$ Coulomb branches. I will place special emphasis on the symplectic singularities that manifest as moduli spaces of vacua within supersymmetric field theories containing 8 supercharges in space-time dimensions ranging from 3 to 6. These instances showcase how geometric features offer elegant descriptions of strongly coupled phenomena.

Ort: Seminarraum A, Währinger Straße 17, 2. Stock

**Zeit: Mittwoch, 13.12.2023, 14.15 h - Seminarraum A, Währinger Straße 17,
2. Stock**

<https://univiena.zoom.us/j/6540036841?pwd=SytyVkZJZzNyRG9lMm13ejlHeHRRUT09>

gez.: P. Chrusciel, D. Fajman