Otto-von-Guericke-Universität Magdeburg Fakultät für Mathematik

Auf Einladung des Institutes für Algebra und Geometrie spricht

Herr Dr. Andriy Regeta

(Friedrich-Schiller-Universität Jena)

über das Thema

## When is a variety determined by its group of automorphisms?

Zoom-Koordinaten: Meeting ID: 951 9966 2620 / Passcode: 461614

Zeit: Dienstag, 22. Juni 2021, 14.00 Uhr

Zu diesem Vortrag laden wir alle Interessierten herzlich ein.

Prof. Petra Schwer

Abstract: I will start with an elementary motivation to the question described in the title. Further, I will show that "manyäffine spherical varieties are determined by their automorphism groups seen as groups with some additional structure (in the category of irreducible affine normal varieties). If the automorphism group is considered only as an abstract group, the problem becomes much more complicated. I will show that affine spherical surfaces and the affine n-space are determined by their automorphism groups seen as abstract groups. (This talk is based on the following papers: https://arxiv.org/abs/1911.10896, https://arxiv.org/abs/1805.03991, https://arxiv.org/abs/1912.01567).