

Otto-von-Guericke-Universität Magdeburg
Fakultät für Mathematik

Auf Einladung des Institutes für Algebra und Geometrie spricht

Philip Möller
(Universität Münster)

über das Thema

**Automorphisms of graph products: Normal subgroups,
the center and automatic continuity**

Der Vortrag findet dual statt.

per Zoom Meeting ID 971 4945 5855, passcode 490213 oder G02-210

Zeit: Dienstag, 31. Mai 2022, 13.00 Uhr

Zu diesem Vortrag laden wir alle Interessierten herzlich ein.

Dr. Olga Varghese

Abstract: In mathematics it is common to study the automorphism group of an object that is being investigated. We study the automorphism group of a graph product of cyclic groups. Given a (finite) collection of groups, there are two natural and „opposite” ways to construct a product: The free product and the direct product. Graph products interpolate between the two by requiring certain factors to commute and others to have no relation. Special cases of graph products of groups are for example right-angled Artin groups and right-angled Coxeter groups. For the automorphism group we will focus on the question how „small normal subgroups” behave and also calculate the center. We then apply these results to automatic continuity and show that in many cases an abstract epimorphism from a locally compact group to the automorphism group is already continuous.