

Otto-von-Guericke-Universität Magdeburg
Fakultät für Mathematik

Auf Einladung des Institutes für Algebra und Geometrie spricht

Marcel Celaya
(ETH Zürich)

über das Thema

Patchworking Oriented Matroids

Der Vortrag findet dual statt.

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

Zeit: Dienstag, 12. Juli 2022, 13.00 Uhr

Zu diesem Vortrag laden wir alle Interessierten herzlich ein.

Prof. Dr. Benjamin Nill

Abstract: A classical result on oriented matroids due to Folkman and Lawrence in 1978 states that they are in bijection with pseudosphere arrangements up to cellular homeomorphism. A more recent result, conjectured by Ardila and Develin in 2007 and proved by Silke Horn in 2016, states that a similar result holds for tropical oriented matroids and tropical hyperplane arrangements. In a joint work with Georg Loho and Chi Ho Yuen, we show how to unify these two results based on a variant of Viro's patchworking technique, generalized to complete intersections by Sturmfels, for a certain class of uniform oriented matroids arising from a triangulation of a product of two simplices.