Otto-von-Guericke-Universität Magdeburg
Fakultät für Mathematik

Auf Einladung des Institutes für Algebra und Geometrie spricht

Herr Xiangying Chen

(Freie Universität Berlin)

über das Thema

Matroids, Chow rings and log-concavity

Zoom-Koordinaten: https://ovgu.zoom.us/j/95199662620
Meeting ID: 951 9966 2620 / Passcode: 461614

Zeit: Dienstag, 27. Oktober 2020, 14.00 Uhr

Zu diesem Vortrag laden wir alle Interessierten herzlich ein.

Prof. Dr. Thomas Kahle

Abstract: The coefficients of the characteristic polynomial of any matroid form a log-concave sequence. This is the Heron-Rota-Welsh conjecture, generalizing the Read-Hoggar conjecture for the log-concavity of chromatic polynomials of graphs, which was open for a half century and had little progress until June Huh's breakthrough by algebro-geometric approach in 2012. Recently, the Heron-Rota-Welsh conjecture was finally proven by Adiprasito, Huh and Katz (2018). The proof is motivated by algebraic geometry, but is pure combinatorial. In this talk, I will present the proof based on Backman, Eur and Simpson (2019).