Julius-Maximilians-
UNIVERSITÄT
WÜRZBURG

MUΦX
Lehrstuhl X

Announcement

Seminar on Deformation Quantization and Geometry

05.06.2026 at 14:00 s.t.

Seminarroom SE 30

Jesse Ratzkin

Classification of fractional, singular Yamabe metrics on a twice punctured sphere I

The Delaunay metrics form a family of conformally flat, constant fractional Q-curvature metrics on a twice-punctured sphere. They are all (after a Möbius transformation) rotationally symmetric and periodic, and admit several elegant variational descriptions. We prove that, when s is close to but less than 1, any complete, conformally flat constant Q-curvature metric on a twice-punctured sphere is a Delaunay metric. Along the way, we prove a sharp a priori bound for the conformal factor of these metrics, which may be of independent interest.

Invited by Madeleine Jotz