



## Einladung zum Oberseminar Mathematik in den Naturwissenschaften

Julius-Maximilians-Universität Würzburg  
Lehrstuhl für Mathematik in den Naturwissenschaften

*Jesse Ratzkin*

Julius-Maximilians-Universität, Würzburg, Germany

### Classification of singular, fractional Yamabe metrics on twice-punctured spheres

The Delaunay metrics form a particularly nice family of complete, constant  $Q$ -curvature metrics on a twice-punctured sphere. After a global conformal transformation, they are all rotationally invariant and periodic, and uniquely determined by their minimum period. We show that, for  $s$  less than but close to one, any complete, constant  $Q$ -curvature metric of (fractional) order  $s$  on a twice punctured sphere is a Delaunay metric. Along the way we obtain sharp a priori estimates, which may be of independent interest.

This is joint work with João Henrique Andrade, Azahara DelaTorre, João Marcos do Ó and Juncheng Wei.

Ort: Mathematik Ost, 40.01.003

Zeit: Donnerstag, 29.01.2026 um 12:00 Uhr

You are cordially invited to this lecture. Request the Zoom link from  
[anja.schloerkemper@uni-wuerzburg.de](mailto:anja.schloerkemper@uni-wuerzburg.de)

gez. Anja Schlömerkemper