



Vienna School
of Mathematics

PhD Colloquium

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Lexell's Theorem on the sphere

Abstract: Our goal is to provide a proof of Lexell's theorem on the sphere. The theorem states that for a spherical triangle ABC with area $|ABC|$, the locus of points X such that $|ABX|=|ABC|$, is the small circle arc passing through C and the antipodal points of A and B . In the process, we will define the necessary concepts of spherical geometry, such as the area of spherical triangles, and draw comparisons between them and their Euclidean counterparts.

April 27, 2026, 15:30-16:30

TUForMath Room DAEGH18, Freihaus, TU Wien
(Wiedner Hauptstrasse 8-10)