

Oberseminar Geometrie und Topologie

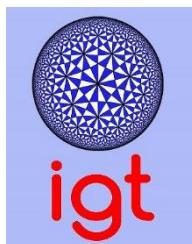
Wintersemester
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Apl. Prof. Andreas Kollross
Universität Stuttgart

Totally geodesic submanifolds in exceptional symmetric spaces

11. Januar 2022 – 16.15 Uhr
Seminarraum IGT, Raum 7.530, Pfaffenwaldring 57

Abstract: Joint work with Alberto Rodríguez-Vázquez. We classify maximal totally geodesic subspaces in exceptional Riemannian symmetric spaces up to isometry. Since the maximal subspaces containing flat factors have been classified by Berndt and Olmos, it suffices to find the semisimple ones. We show that these correspond to subalgebras in the Lie algebra of the isometry group which are maximal among the semisimple subalgebras without compact ideals. To find all such subalgebras of simple real Lie algebras, we use earlier classification results by Dynkin, de Graaf-Marrani and Komrakov.



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