

Totally geodesic submanifolds in homogeneous spaces diffeomorphic to CROSSes

Andreas Vermeiren

(KU Leuven)

We provide tools for studying totally geodesic submanifolds in homogeneous spaces. We then specialize to the case of homogeneous spaces that are diffeomorphic to compact rank one symmetric spaces (CROSSes). As a result, we obtain some classification results for totally geodesic submanifolds in complex projective spaces and spheres equipped with an arbitrary $\mathrm{Sp}(n)$ -invariant homogeneous metric. This talk is based on an ongoing joint work with Michaël Liefsoens and Alberto Rodríguez Vázquez.

Data: Xoves 11 de decembro de 2025

Lugar: Aula 5 da Facultade de Matemáticas, USC.

Hora: 16:00 h