

Dr. Tomás Otero Casal

Westfälische Wilhelms-Universität Münster

Isometric actions on products

**28. November 2024– 16:15 Uhr
Raum 7.530**

Abstract: An isometric action on a Riemannian manifold is said to be of cohomogeneity one if its regular orbits are hypersurfaces. Such actions are a useful tool for the construction of various geometric structures, and also interesting from the viewpoint of submanifold geometry. The classification of cohomogeneity one actions on Euclidean and hyperbolic spaces follows from classical work of Segre, Levi-Civita and Cartan on isoparametric hypersurfaces. However, obtaining similar results for more general manifolds has proven to be a difficult problem.

In this talk, I will report on ongoing work with Hiroshi Tamaru where we study isometric actions on products of Riemannian manifolds. Using this, we are able to classify homogeneous codimension one foliations on (simply connected) symmetric spaces.

