

ORAL COMMUNICATION

Pseudo-Riemannian geometry on homogeneous manifoldsANA CRISTINA FERREIRA^a^a Institution: Universidade do MinhoE-mail: anaferreira@math.uminho.pt**Abstract**

I will present a gentle introduction to the world of pseudo-Riemannian geometry and its interaction with the study of manifolds with many symmetries known as homogeneous spaces. I will also overview the topics of G -structures, connections with or without torsion and geodesic (in)completeness while giving many examples.

Keywords symmetry, G -structure, metric, connection, torsion, geodesic

References

- [1] A. Elshafei, A.C. Ferreira, H. Reis: *Geodesic completeness of pseudo and holomorphic-Riemannian metrics on Lie groups*. *Nonlinear Analysis* **232**, 113252 (2023)
- [2] B. Djebbar, A.C. Ferreira, A. Fino, N.Z. Larbi Youcef: *Locally conformal SKT structures*. *International Journal of Mathematics* **33 (14)**, 2250092 (2022)
- [3] A.C. Ferreira: *Non-existence of orthogonal complex structures on the round 6-sphere*. *Differential Geometry and its Applications* **57**, 87–93 (2018)