

WORKSHOP ON SUBMANIFOLD THEORY AND GEOMETRIC ANALYSIS

UFSCAR, SÃO CARLOS, BRAZIL, AUGUST 05 – 09, 2019

THURSDAY- 16h - 16:50h -AUDITÓRIO DO DM

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Submanifold theory in Finsler Geometry

ABSTRACT. In this talk, we will describe basic results in the theory of submanifolds of Finsler manifolds. First, we will give some tools needed for this study. In particular, we will show that it is possible to define a Levi-Civita anisotropic connection associated with a Finsler metric. We will also show how to define the derivative of an anisotropic tensor (a tensor which depends on the direction rather than on the points of the manifold) and how to define the curvature tensor of an anisotropic connection, giving some results as Bianchi Identities and formulas relating the curvature of two different anisotropic connections. Next, we will study the curves that minimize the distance to a submanifold, showing that locally orthogonal geodesics are minimizers, and then we will study the Gauss equation of a submanifold. We will finish the talk speaking briefly about minimal submanifolds and the embedding problem.

Support:



Organizers:

