

# WORKSHOP ON SUBMANIFOLD THEORY AND GEOMETRIC ANALYSIS

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

WEDNESDAY- 10:30h - 11:20h -AUDITÓRIO DO DM

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## Riemannian Foliations with Positive Curvature

ABSTRACT. A foliation is called Riemannian if its leaves are locally equidistant. We consider Riemannian foliations with positive (transverse) sectional curvature. In the simple case that all leaves are closed, the leaf space is a Riemannian orbifold inheriting the positive curvature from the foliation, whereas in the presence of non-closed leaves the leaf space is not even Hausdorff. In this talk we consider the other extreme case, in which there is a non-closed leaf whose closure is of maximal dimension. We then show that the ambient manifold fibers over a finite quotient of a sphere or a weighted complex projective space. We also show that all leaves of a Riemannian foliation of a compact manifold with finite fundamental group and nonvanishing Euler characteristic are closed. This is a joint work with Francisco Caramello. These results are part of joint works with Darlan de Oliveira.

Support:



Organizers:

