

WORKSHOP ON SUBMANIFOLD THEORY AND GEOMETRIC ANALYSIS

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

THURSDAY- 17h - 17:50h -AUDITÓRIO DO DM

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Introduction to Orbifolds

ABSTRACT. These are course notes, intended to survey the basics of orbifold theory, for the mini-course “Introduction to Orbifolds” held on the Workshop on Submanifold Theory and Geometric Analysis at Federal University of São Carlos, Brazil (August 05 – 09, 2019). We introduce orbifolds, relating them with group actions, then we see how elementary objects from Algebraic Topology generalize to orbifolds, such as the fundamental group and Euler characteristic, then we proceed to the generalizations of classical objects from Differential Geometry to orbifolds, studying orbibundles, differential forms, integration and De Rham cohomology, and finally we endow orbifolds with Riemannian metrics and survey some generalizations of classical results from Riemannian Geometry to this setting.

Support:



Organizers:

