

HOLONOMY AND G -STRUCTURES

Francisco Martín Cabrera
University of La Laguna

ABSTRACT. At the beginning we will describe the notion of holonomy and its relation with the curvature and torsion-free or integrable G -structures in order to display the Riemannian holonomy Berger's Theorem. Then we will focus on some non-integrable G -structures, that is, G -structures with torsion. In particular, we will expose the recent progress on the structure of nearly Kähler manifolds.