Conferencia

SANTALÓ 2013

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Complex and Quaternionic Differential Geometry

The differential geometry of complex manifolds is usually approached through the study of Kähler manifolds. These are Riemannian manifolds with holonomy in the unitary group U(m). But there are other structures which are also interesting and one of these is the class of manifolds with a torsion-free connection having holonomy in the noncompact real Lie group U*(2m). These are also called quaternionic complex manifolds. In this geometry one can discuss geodesics and completeness and the notion of volume but there is in general no concept of distance. However, they occur quite naturally associated to other differential-geometric structures and in particular there are links to the so-called c-map in string theory. The lecture will focus on these new approaches and examples.

JUEVES, 10 DE OCTUBRE DE 2013
13:00 HORAS
AULA S-118 "MIGUEL DE GUZMÁN"
FACULTAD CC. MATEMÁTICAS