

Département de Mathématiques, Université de Fribourg

Oberseminar Geometrie und Topologie

Wednesday, May 13, 2009 - 10:20-12:00

Seminarraum, Departement für Mathematik II
(Dépendence Lonza), Université de Fribourg

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From G-structures to Cartan geometries and back

A G-structure on a manifold is a reduction of its first order frame bundle with structure group G . The equivalence problem for G-structures naturally leads to the concept of a Cartan geometry.

Conversely, every Cartan geometry can be used to construct G-structures on certain quotient manifolds.

As an application of this construction, I will show how the Cartan geometry of an even dimensional projective manifold gives rise to an almost complex structure on its bundle of complex structures.

<http://www.unifr.ch/math/seminars/OSgeom-top.html>