Seminar on Differential Geometry:

Locally conformally Kähler manifolds

Kähler manifolds are complex manifolds endowed with a compatible Riemannian metric. Kähler geometry has been an active field of research for a century, at the intersection of complex, Riemannian and symplectic geometry. Although all smooth complex algebraic varieties are Kähler, which yields a wealth of examples, it is also true that many compact complex manifolds fail to be Kähler. It turns out that such a manifold may still admit a Hermitian metric which is locally conformal to a Kähler metric. In the seminar we will study this very interesting class of complex manifolds with special attention to the case of complex surfaces.

All participants are invited to a first meeting (Vorbesprechung) on Wednesday, July 13, 2011, 14 o'clock in room 1241.