

The seminar on Differential geometry will start on Monday, September 24, 2018, at 10.00, in the lecture room M5 with the first lecture

**Henrik Winther:**

### **Symmetries of complex submanifolds of quaternionic manifolds**

Abstract:

The generalized Feix construction (by A.Borowka, D.Calderbank) identifies c-projective manifolds with type 1,1 curvature with the totally complex submanifolds of quaternionic manifolds. Our goal is to investigate the relationship between c-projective symmetries and quaternionic symmetries in this setting. We will show when a symmetry can be lifted to the quaternionic manifold. Moreover, we show that any maximally- or sub-maximally symmetric quaternionic manifold arises from the construction, for some c-projective manifold. In particular, a (sub-)maximally symmetric c-projective manifold can be used to construct a (sub-)maximally symmetric quaternionic manifold. This is a joint work with A. Borowka.