# Oberseminar Geometrie und Topologie

## Sommersemester 2022

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## Compact Kähler manifolds with nonnegative sectional curvature.
### Remarks on an argument of Alfred Gray

**31. Mai 2022 – 16.15 Uhr**
**IGT-Seminarraum 7.530, Pfaffenwaldring 57**

Abstract: In his Inventiones article from 1977 Alfred Gray proved that compact Kähler manifolds with nonnegative sectional curvature are locally symmetric. The main idea was to consider the holomorphic sectional curvature as a function on the sphere bundle of the manifold and to apply suitable Weitzenböck formulas. The goal of my talk will be to present a short and clear version of Gray's proof and, if time permits, discuss possible applications of the argument in quaternion Kähler geometry.

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