

CASES OF CONSTANT HOLOMORPHIC SECTIONAL CURVATURE OF THE BERGMAN METRIC

John Treuer

(University of California - San Diego)

Abstract: In 2023, Huang and Li considered complex manifolds admitting a Bergman metric of constant holomorphic sectional curvature. Building on their work, in this talk we show that no complex manifold with a well-defined Bergman metric can have holomorphic sectional curvature identically equal to zero. The other cases when the holomorphic sectional curvature is a negative constant or a positive constant, from Huang and Li's work, will also be reviewed.