

Fakultät für Mathematik und Naturwissenschaften

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Im Rahmen der

AG Komplexe Analysis

laden wir zu folgendem Vortrag ein:

Remarks on special pseudoconvex domains (Prof. Takeo Ohsawa, Nagoya University, Japan)

am Montag, den 28.11.2016, um 14 Uhr c.t. in Raum G.15.20.

Abstract: There exist counterexamples of the Levi problem for ramified Riemann domains over \mathbb{C}^n and for smoothly bounded pseudoconvex domains in complex manifolds. First, an example of non-Stein complex manifold will be presented which is a locally Stein locally closed complex submanifold of \mathbb{C}^n . This is a simplified variant of a counterexample of Oka's conjecture by Fornæss. There exist Stein manifolds that are realized as smoothly bounded domains with Levi flat boundary. In contrast with Grauert's counterexample of Levi flat domains without nonconstant holomorphic functions, there exist Levi flat Stein domains in some tori and Hopf manifolds, as well as in some ruled surfaces over compact Riemann surfaces of genus ≥ 1 . After recalling some of such domains, a result recently obtained by M. Adachi on a variant of Weierestrass approximation theorem for one of such domains will be discussed.