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Im Rahmen der

AG Komplexe Analysis

laden wir zu folgendem Vortrag ein:

Pluricomplex Green functions on manifolds
(Prof. Evgeny A. Poletsky, Syracuse University)

am **Dienstag, den 29.10.2019, um 16 Uhr c.t. in G.15.25**.

Abstract: In this talk we will discuss the pluricomplex Green functions on manifolds. The main goal is to establish properties of complex manifolds that preserve the basic features of them on relatively compact or hyperconvex domains in Stein manifolds.

The features we have in mind on relatively compact domains in Stein manifolds are:

1. Caratheodory and Kobayashi hyperbolicity;
2. existence of the Bergman metric;
3. existence of the pluricomplex Green functions with the strict logarithmic pole;
4. existence of continuous bounded strictly plurisubharmonic functions;

and on hyperconvex domains in Stein manifolds are:

1. continuity of the pluricomplex Green functions in both variables;
2. the pluricomplex Green functions are exhaustion functions;
3. completeness of the Bergman and Kobayashi metrics;
4. existence of a smooth strictly plurisubharmonic negative exhaustion function.

Finally, we will demonstrate how to use the pluricomplex Green functions to obtain biholomorphically invariant compactifications of complex manifolds.

Alle Interessenten sind herzlich eingeladen!

gez. Prof. N. Shcherbina