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Im Rahmen der

## AG Komplexe Analysis

laden wir zu folgendem Vortrag ein:

**Pluripotential compactification of complex manifolds**

(**Prof. Evgeny Poletsky, Syracuse University, USA**)

am Dienstag, den **10.07.2018**, um **16 Uhr c.t.** in **G.15.25**.

**Abstract:** We will show that every complex manifold  $M$  has an admissible volume form  $V$ . Such forms have the following properties: firstly, the space  $PSH_-(M)$  of negative plurisubharmonic function on  $M$  lies in  $L^1(M, V)$ . Secondly, different admissible functions generate equivalent norms on  $PSH_-(M)$  and, thirdly, the set of functions in  $L^1(M, V)$  with the unit norm is compact.

Let  $M$  be a pluri-Greenian manifold, i.e., for each  $w_0 \in M$  the pluricomplex Green function  $g_M(z, w_0) = -\infty$  only when  $z = w_0$ . We will show that the closure of the imbedding of  $M$  into  $L^1(M, V)$  by the mapping  $\Phi$  defined as  $\Phi(w) = c(w)g_M(z, w)$ , where  $c(w)$  is a normalizing factor, is a biholomorphically invariant compactification of  $M$ .

Alle Interessenten sind herzlich eingeladen!

gez. Prof. N. Shcherbina