

BERGISCHE UNIVERSITÄT  
WUPPERTAL  
Gaußstraße 20  
42119 Wuppertal



*Fachbereich C, Mathematik  
und Naturwissenschaften*

Prof. Dr. Nikolay Shcherbina

Telefon: (0202) 439-3041

Raum: G.15.19

Im Rahmen der

## AG Komplexe Analysis

laden wir ein zu folgendem Vortrag:

### Riemann surfaces in Stein manifolds with density property (Rafael Benedikt Andrist, University of Bern)

am Freitag, den 01.07.2011, um 14 Uhr in Raum.

**Abstract:** I will first give an introduction to Stein manifolds with density property and to Andersén–Lempert theory. These manifolds have a rich group of holomorphic automorphisms which gives some flexibility for geometric constructions.

It is well known that open Riemann surfaces admit a proper holomorphic immersion into  $\mathbb{C}^2$  and a proper holomorphic embedding into  $\mathbb{C}^3$ . This result is generalized for proper holomorphic immersions (resp. embeddings) into Stein manifolds with density property of dimension 2 (resp. 3). The proof combines Andersén–Lempert theory with glueing techniques of Forstnerič in a Morse theoretic framework.

In the end I would like to give some applications and discuss related open questions.

Alle Interessenten sind herzlich eingeladen!

gez. Prof. N. Shcherbina