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*Fachbereich C, Mathematik
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Im Rahmen der

AG Komplexe Analysis

laden wir ein zu folgenden Vorträgen:

I. Solving $\bar{\partial}_b$ on hyperbolic laminations (Prof. Erlend F. Wold, Oslo)

am Montag, den 06.12.2010, um 16 Uhr c.t. in Raum D.13.15.

Abstract: We will talk about the $\bar{\partial}$ -equation on laminations. A lamination is a topological space which is foliated by Riemann surfaces, and the complex structure as well as the differential operators are defined only along the surfaces/leaves (for instance a Leviflat surface). Given a sufficiently positive line bundle L over a compact hyperbolic lamination (all leaves are covered by the disk), we will show that we can solve the debar-equation with coefficients in L . By well known theory, it is easy to obtain solutions along each Riemann surface - the difficulty is to obtain solutions that vary continuously/smoothly between leaves. For instance, all leaves could be dense in the lamination. As an application we obtain an embedding result a la Kodaira for a certain class of abstract Riemann surface laminations. This is used to produce examples in projective spaces, of Riemann surface laminations and associated laminated currents. In particular it follows that a certain uniqueness theorem for harmonic currents in $\mathbb{C}P^2$, due to Forneaess and Sibony (GAFA, 15, 2005), does not hold in higher dimensions. This is joint work with J. E. Forneaess.

II. On proper embeddings of Riemann surfaces into \mathbb{C}^2 (Prof. Erlend F. Wold, Oslo)

am Dienstag, den 07.12.2010, um 16 Uhr c.t. in Raum G.15.25.

Alle Interessenten sind herzlich eingeladen!

gez. Prof. N. Shcherbina