ZVR 298034776

# dbar10 Workshop

The dbar-Neumann problem: Analysis, Geometry, and Potential Theory
December 13 - 22, 2010
organized by F. Haslinger, B. Lamel, E. Straube

### Schedule of lectures for Week 1 (December 13 - 17)

## • Monday, December 13

14:00-14:50: Al Boggess: New Formulas for the Fundamental Solution to  $\Box_b$  on Certain Quadrics

15:00 - 15:30: coffee

15:30 – 16:20: **Andrew Raich**: Gaussian estimates for  $\square_b$  heat kernels and quantitative smoothness estimates

16:30 – 17:20: Margit Pap: Connection between Zernike functions, corneal topography and the voice transform

#### Tuesday, December 14

09:30 – 10:20: **Joseph Kohn**: *PDE with loss of derivatives* 

10:30 – 11:00: **coffee** 

11:00 – 11:50: **Jeff McNeal**: Non-holomorphic projections and extension of biholomorphic maps

12:00 - 13:30: lunch

13:30 – 14:20 **Debraj Chakrabarti**: The dbar-equation on product domains

14:30 – 15:00: **coffee** 

15:00 – 15:50: **Christine Laurent**: Stability of embeddability under perturbation of the CR structure for compact CR manifolds

16:00 - 16:50: Ingo Lieb: The Neumann problem on non-smooth strictly pseudoconvex domains

### • Wednesday, December 15

09:30 - 10:20: Jean Ruppenthal: Compactness of the dbar-Neumann operator on singular complex spaces

10:30 - 11:00: **coffee** 

11:00 – 11:50: **Jeff McNeal**: Regularity of twisted d-bar Neumann problems

# • Thursday, December 16

09:30 – 10:20: **Shif Berhanu**: A new class of FBI transforms and applications to holomorphic extendability of CR functions

10:30 - 11:00: coffee

11:00 – 11:50: **Abdelhamid Meziani**: On the hypoellipticity of differential forms with isolated singularities

12:00 - 14:00: lunch

14:00 – 14.50: **Nordine Mir**: *Algebraic approximation in CR geometry* 

15:00 - 15:30: **coffee** 

15:30 – 16:20: Siqui Fu: Comparison of the Bergman and Szegö kernels

16:30 - 17:20: Takeo Ohsawa: Variation of the Bergman kernel and the cone of Kähler deformability tangents

### • Friday, December 17

09:30 – 10:20: **Emil Straube**: Compactness of the complex Green operator on CR-submanifolds of hypersurface type

10:30 – 11:00: **coffee** 

11:00 – 11:50: **Samangi Munasinghe**: Geometric Sufficient Conditions for Compactness of the Complex Green Operator