



Workshop on

DVR 0065528

"Analysis and CR Geometry"

December 10 – 14, 2018

organized by

Shif Berhanu (Temple U), Anne-Katrin Gallagher (Oklahoma State U), Bernhard Lamel (U Vienna), Takeo Ohsawa (Nagoya U)

• Monday, December 10, 2018

09:00 – 09:20 **Opening & Registration**

09:20 – 10:10 **Bernhard Lamel** Some aspects of the work of Friedrich Haslinger

10:10 – 10:40 *Coffee / Tea break*

10:40 – 11:30 **Siqi Fu** Aspects of Emil J. Straube's work on the $\overline{\partial}$ -Neumann problem

11:40 – 12:10 **Purvi Gupta** Convexity properties of even-dimensional compact manifolds

12:10 - 14:00 Lunch break

14:00 – 14:50 **Judith Brinkschulte** *On Levi-flat CR manifolds, positive line bundles and extension problems*

15:00 – 15:30 Severine Biard Weighted L^2 polynomial approximation in $\mathbb C$

15:30 – 16:00 *Coffee / Tea break*

16:00 – 16:50 **Laurent Stolovitch** *Linearizations of neighborhoods of embeddings of complex compact manifolds*

• Tuesday, December 11, 2018

09:00 – 9:50 Nikolay Shcherbina On core and hyperbolicity of some model domains

09:50 – 10:20 *Coffee / Tea break*

10:20 – 11:10 **Jeffery McNeal** *Irregularity of Bergman projections and consequences*

11:20 – 11:50 **Luke Edholm** Sub-Bergman projections: Duality and Approximation

11:50-14:00 Lunch break

14:00 – 14:50 Jean Ruppenthal

Chern forms of singular metrics on vector bundles

15:00 – 15:30 Martin Sera Wedge Products of closed positive currents with analytic singularities and its application

15:30 – 16:00 Coffee / Tea break

16:00 – 16:50 **Nordine Mir** *Convergence and Divergence of formal CR mappings*

• Wednesday, December 12, 2018

09:00 – 09:50 Chin-Yu Hsiao G-equivariant embedding theorems for CR manifolds of high dimension

09:50 – 10:20 Coffee / Tea break

10:20 – 11:10 **Ilya Kossovskiy** *Real-analytic coordinates for smooth CR-hypersurfaces*

11:20 – 11:50 **Yunus Zeytuncu** Spectra of Kohn Laplacians on CR manifolds

• Thursday, December 13, 2018

09:00 – 09:50 **John D'Angelo** *Rational Spere Maps*

09:50 - 10:20 Coffee / Tea break

10:20 – 11:10 **Peter Ebenfelt** Bounded strictly pseudoconvex domains in \mathbb{C}^2 with obstruction flat boundary

11:20 – 11:50 **Sean Curry** *CR manifolds with an essential symmetry*

11:50 - 14:00 Lunch break

14:00 – 14:30 **Giuseppe Della Sala** A characterization of sphericity by analytic discs

14:40 – 15:30 **Paulo D. Cordaro** Semi-local analytic solvability in differential complexes associated to locally integrable structures

15:30 – 16:00 Coffee / Tea break

16:00 – 16:50 **Jorge G. Hounie** Global solvability of real analytic involutive systems on compact manifolds, Part 2

• Friday, December 14, 2018

09:00 – 09:50 **Christine Laurent-Thiebaut** *Characterizing density properties by mean of Dolbeault cohomology*

09:50 – 10:20 Coffee / Tea break

10:20 – 11:10 **Jiri Lebl** *Levi-flat Plateau problem*

11:20 – 11:50 Masanori Adachi Ampleness of positive CV line bundles over Levi-flat manifolds, revisited

11:50-14:00 Lunch break

14:00 – 14:30 Florian Bertrand

Stationary discs and jet determination for non-degenerate real submanifolds

14:40 – 15:30 **Franc Forstneric** *H-principle for complex contact structures on Stein manifolds* 15:30 – 16:00 *Coffee / Tea break*

All talks take place at the ESI, Boltzmann Lecture Hall!