

Jean Ruppenthal: $\bar{\partial}$ on singular complex spaces, III

In the last talk, we will recall the two fine resolutions for the direct image of the canonical sheaf of a desingularization presented last week. These resolutions provide very useful local information for arbitrary complex spaces: e.g. the results of Pardon and Stern (on projective varieties) can be generalized easily to compact complex spaces (or some kinds of strongly pseudoconvex domains). Other applications are Hartogs' extension theorem for $(n - 1)$ -complete spaces, and compactness of certain $\bar{\partial}$ Neumann operators.