Université de Grenoble I Institut Fourier UMR 5582 UJF/CNRS

Distributional boundary values of holomorphic functions on piecewise smooth domains. Debraj Chakrabarti

The boundary-values of a holomorphic functions singular at the boundary can be represented as generalized functions. On an infinitely differentiable boundary one has distributional boundary values, and on a real-analytic boundary one has boundary values in the sense of Sato hyper-functions. We discuss how one can generalize this notion to boundaries which are only piecewise smooth. We also give a characterization of the distributional boundary values of holomorphic functions on products of smoothly bounded domains in complex manifolds. This is joint work with Rasul Shafikov.