

1134-32-41

Debraj Chakrabarti* (chakr2d@cmich.edu), **Luke Edholm** and **Jeff McNeal**. *Bergman Spaces on Reinhardt Domains*. Preliminary report.

Let Ω be a possibly non-smooth Reinhardt domain in \mathbb{C}^n , and let $A^p(\Omega)$ be the Banach space of holomorphic functions on Ω whose p -th powers are integrable, $p \geq 1$. We study properties of $A^p(\Omega)$ as a linear space, for example, the question of convergence of Laurent series of functions in $A^p(\Omega)$ in the norm of $A^p(\Omega)$, and that of determining the dual of $A^p(\Omega)$. These questions have unsurprising answers when Ω is the unit disc in the plane. We show there are new phenomena in the general situation, some only partially understood. In particular we look at the special case of the Hartog's triangle, where some of the computations can be performed explicitly. This is joint work with Luke Edholm and Jeff McNeal. (Received July 10, 2017)