

1116-32-1378 **Zhenghui Huo*** (huo3@illinois.edu). *The Bergman kernel on some Hartogs domains.*

We introduce a technique for finding the Bergman kernel on certain Hartogs domains. Let $\Omega \subseteq \mathbb{C}^{n+m}$ be Hartogs and star shaped in first n variables. Let $\mathcal{U} \subseteq \mathbb{C}^{n+m+k}$ be a domain constructed in a certain way by Ω . We obtain the Bergman kernel $B_{\mathcal{U}}$ by applying a k -th order differential operator to B_{Ω} . Using our formula and some admissible approach regions, we analyze the boundary behaviors of $B_{\mathcal{U}}$. In our setting, some \mathcal{U} 's have non-smooth boundaries. (Received September 19, 2015)