1142-32-82 **Aaron Peterson*** (aaron.peterson@northwestern.edu). Diagonal Estimates for the Bergman Kernel in Pseudoconvex Model Domains. Preliminary report.

Let $\Omega = \{(z_1, \ldots, z_n, z_{n+1}) \in \mathbb{C}^{n+1} : \operatorname{Im}(z_{n+1}) > P(z_1, \ldots, z_n)\}$, where $P : \mathbb{C}^n \to \mathbb{R}$ is plurisubharmonic. Under some mild non-degeneracy conditions on P, for holomorphic functions defined on Ω we establish a new mean-value theorem over a special class of large sets. As an application we obtain new diagonal estimates for the Bergman kernel in Ω . (Received August 29, 2018)