Ovidiu Furdui* (o0furdui@wmich.edu), Western Michigan University, Department of Mathematics, Kalamazoo, MI 49008. On a class of Integral Operators related to the Fock Spaces.

For real parameters a, b, c and s, where s is a positive number we determine exactly when the Bergman type integral operators

$$T_{a,b,c}f(z) = \int_{\mathbb{C}^n} e^{a|z|^2 + b\langle z, w \rangle + c|w|^2} f(w) dv_s(w)$$

and

$$S_{a,b,c}f(w) = \int_{\mathbb{C}^n} |e^{a|z|^2 + b\langle z, w \rangle + c|w|^2} |f(w)dv_s(w)|$$

are bounded on $L^p(\mathbb{C}^n, dv_s(z))$, where $dv_s(z) = \left(\frac{s}{\pi}\right)^n e^{-s|z|^2} dv(z)$ is the Gaussian probability measure on \mathbb{C}^n and dv is the ordinary Lebesque measure on \mathbb{C}^n . This generalizes a result obtained recently by professor Kehe Zhu. (Received July 10, 2006)