1035-47-1804   **BO LI*** (`boli@buffalo.edu`), Room 244 Mathematics Building, Department of Mathematics, State University of New York at Buffalo, Buffalo, NY 14260. *The Berezin Transform and mth Order Bergman Metric.*

We improve upon recent directional derivative estimates for Berezin's operator calculus. Higher order directional derivative estimates of Berezin transforms are also obtained, which reduce to known results for the Bloch space of the unit ball. The key geometric ingredient in this analysis is the mth order Bergman metric of Burbea. (Received September 20, 2007)