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Anne-Katrin Herbig* (herbig@umich.edu), Dept. of Math., University of Michigan, 2074 East Hall, 530 Church Street, Ann Arbor, MI 48109, and **Jeffery D McNeal** (mcneal@math.ohio-state.edu), Dept. of Math, Ohio State University, 231 West 18th Avenue, Columbus, OH 43210. *Global regularity of the Bergman projection on forms.*

Let D be a smoothly bounded domain in \mathbb{C}^n . Suppose D has a smooth defining function, such that the sum of any j eigenvalues of its complex Hessian is non-negative on the boundary of D . We show that this condition implies global regularity of the Bergman projection on $(0, q)$ -forms for $j - 1 \leq q \leq n$. This extends the result by Boas and Straube, that global regularity of all Bergman projections follows, if D admits a smooth defining function which is plurisubharmonic on the boundary of D . However, our method of proof differs considerably. This is joint work with J.D. McNeal. (Received February 02, 2006)