

1039-47-159

Linda J Patton* (lpatton@calpoly.edu), Mathematics Department, Cal Poly, San Luis Obispo, CA 93402, and **Christopher Hammond**. *Composition operator norm inequalities.*

Let φ be an analytic map from the open unit disk to itself. It is well known that for any such symbol, the associated composition operator C_φ is bounded on all standard weighted Bergman spaces. However, the operator norm is unknown except for a few classes of symbols. In all known examples, the norm of C_φ on the standard unweighted Bergman space is less than or equal to the square of the norm of C_φ on Hardy space. We establish this inequality for all symbols φ as part of a collection of operator norm inequalities on certain weighted Bergman spaces. Geometric interpolation of Hilbert spaces extends our results to intermediate weighted Hilbert spaces. (Received March 11, 2008)