

Meeting: 1005, Newark, Delaware, SS 12A, Special Session on Geometric Analysis

1005-32-8 **Patrick W. Darko*** (pdarko@math.udel.edu), Department of Mathematical Sciences, University of Delaware, Newark, DE 19716. *Sobolev Estimates for the Complex Monge-Ampere Operator on Complex Manifolds.*

Solutions of the Complex Monge-Ampere Equation are obtained in the Sobolev topology on complex manifolds and through the Delta-Delta-Bar Lemma, in case the manifold is Compact Kahler a simple proof is given of the Aubin-Calabi-Yau Theorem. (Received October 20, 2004)