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**Xiangwen Zhang\*** (xzhang@math.mcgill.ca), Department of Mathematics and Statistics,  
McGill University, 805 Sherbrooke W., Montreal, Quebec H3A2K6. *A priori estimates for complex  
Monge-Ampère equation on Hermitian manifolds.*

I will talk about the regularity of complex Monge-Ampère type equations on Hermitian manifolds. Our main results give the  $C^1$  and  $C^2$  estimates for the solution of the complex Monge-Ampère equation, and also give the gradient estimates for the geometric solution of complex Hessian equation when the background manifold is Hermitian. (Received February 17, 2010)