Yifei Pan* (pan@ipfw.edu), 2101 E. Coliseum Blvd., Fort Wayne, IN 46805-1499. On unique continuation of Cauchy-Riemann operator with L² potentials.

In this talk, we prove a unique continuation theorem on Cauchy-Riemann operator with L^2 potential. Specifically, if u(z), defined near the origin in the complex plane to C^n , and vanishing to infinite order there, satisfies $\bar{\partial}u/u \in L^2$, then u is identically zero. This result is sharp due to a counterexample of Mandache and If L^2 is replaced by L^q where q > 2, the result is due to S. Ivashkovich and V. Shevchishin. (Received August 18, 2013)