Liwei Chen* (liweic@ucr.edu). Cauchy transform and the d-bar equation on product spaces.

In this talk, we will go over the classical Cauchy formula, then generalize it to a higher dimensional version on product spaces. Meanwhile, this formula provides a solution operator to the d-bar equation. Using this operator, we obtain Sobolev, some special $L^p$, and some special Holder regularities of the solution. (Received August 13, 2019)