

# VIRTUAL EAST-WEST SCV SEMINAR

May 18, 2021

Yuan ZHANG  
Indiana University Fort Wayne

---

## UNIFORM ESTIMATES FOR THE CANONICAL SOLUTION TO THE $\bar{\partial}$ -EQUATION ON PRODUCT DOMAINS

---

Let  $\Omega$  be a Cartesian product of bounded planar domains with  $C^2$  boundary in  $\mathbb{C}^n$ . We show the canonical solution to the  $\bar{\partial}$ -equation on  $\Omega$  satisfies the uniform estimate if the datum is continuous up to the boundary. This generalizes Landucci's result for the bidisc toward higher dimensional product domains and confirms an open problem of Kerzman under the continuous data setting. The talk is based on a joint work with Robert Xin Dong and Yifei Pan.

---