

$\bar{\partial}$ -Neumann problem on product domains

Abstract

We discuss the solution to the $\bar{\partial}$ -Neumann problem on a product of domains in \mathbb{C}^n . We set up the problem for $(0,1)$ -forms on a product of upper half planes, with a diagonal metric tensor. We analyze singularities of the solution, and we also consider the canonical solution to the $\bar{\partial}$ problem.