1022-32-146   **Dariush Ehsani*** (`ehsani@psu.edu`), Penn State - Lehigh Valley, Department of Mathematics, 8380 Mohr Lane, Fogelsville, PA 18051. *The $\bar{\partial}$ problem on a bi-disk.*

Let N be the $\bar{\partial}$-Neumann operator. Then $\bar{\partial}^* N$ is the solution operator to the $\bar{\partial}$ problem giving the solution with minimal L^2 norm. We discuss various aspects in solving the $\bar{\partial}$ problem on the bi-disk in $\mathbb{C}^2$, and in particular, we focus on singularities which occur through the Neumann operator, and the cancellation of those singularities by the operator $\bar{\partial}^*$. (Received September 12, 2006)