

# Compactness for the $\bar{\partial}$ - Neumann problem - a functional analysis approach

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We characterize compactness of the  $\bar{\partial}$ -Neumann operator for a smoothly bounded pseudoconvex domain and in the setting of weighted  $L^2$ -spaces on  $\mathbb{C}^n$ . For this purpose we use a description of relatively compact subsets of  $L^2$ -spaces. We also point out how to use this method to show that property (P) implies compactness for the  $\bar{\partial}$ -Neumann operator on a smoothly bounded pseudoconvex domain.