

A VARIANT OF PROPERTY (P_q) ON SMOOTH PSEUDOCONVEX DOMAINS

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ABSTRACT. Based on D. Catlin's work, Property (P_q) of the boundary implies the compactness of the $\bar{\partial}$ -Neumann operator N_q on smooth pseudoconvex domains. We discuss a variant of Property (P_q) of the boundary of a smooth pseudoconvex domain for certain levels of L^2 -integrable forms. This variant of Property (P_q) on the one side, implies the compactness of N_q on the associated domain, on the other side, is different from the classical Property (P_q) of D. Catlin and Property (\widetilde{P}_q) of J. McNeal.