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Maximal hypoellipticity for the $\overline{\partial}$-Neumann problem.

We establish maximal hypoellipticity (in L^p-Sobolev and Lipschitz norms) for the $\overline{\partial}$-Neumann problem on smooth, bounded pseudoconvex domains in $\mathbb{C}^n$ under the weakest possible condition on the Levi form. In particular, maximal hypoellipticity holds on the level of $(n-1)$-forms for all smooth, bounded pseudoconvex domains of finite commutator type. These results are new in dimensions $n \geq 3$. (Received August 18, 2012)