

BOUNDARY REGULARITY OF ADMISSIBLE OPERATORS

CHRISTOPH H. LAMPERT

Abstract

In strictly pseudoconvex domains with smooth boundary, we prove a *commutator relationship* between *admissible integral operators*, as introduced by Lieb and Range, and *smooth vector fields* which are tangential at boundary points. This makes it possible to gain estimates for admissible operators in function spaces which involve tangential derivatives. Examples are given under which circumstances these can be transformed into genuine Sobolev- and C^k -estimates.

2000 *Mathematics Subject Classification.* 47G10, 32A25.

Key words. Integral operators, commutator relationship, $\bar{\partial}$ -Neumann-problem.