Séverine Biard and Emil Straube* (straube@math.tamu.edu). Estimates for the complex Green operator: symmetry.

Let M be a pseudoconvex, oriented, bounded and closed CR-submanifold of \mathbb{C}^n of hypersurface type, of CR-dimension (m-1). We show that Sobolev estimates for the complex Green operator hold for (p,q)-forms if and only if they hold for (m-p,m-1-q)-forms. Symmetries of this type have been known to hold for compactness and subelliptic estimates. Sobolev estimates are more delicate in that certain error terms cannot be absorbed and so must be avoided. This is joint work with Séverine Biard. (Received February 26, 2017)