Pipher, Jill (Brown University, USA)

Boundary value problems for complex coefficient p-elliptic operators

Abstract: This lecture will report on joint work with Martin Dindos: we consider Dirichlet and regularity problems, as well as perturbation theory, for a class of elliptic operators with complex coefficients satisfying the p-ellipticity condition. Our assumption is a strengthening of a condition introduced by Cialdea and Maz'ya in connection with their work on L^p-dissipativity, and was also investigated by Carbonaro and Dragicevic in their work on boundedness of bilinear forms, where the term p-elliptic originates.