1139-35-552 **Jill Pipher*** (jill_pipher@brown.edu), Box 1917, 151 Thayer St., Dept of Mathematics, Brown University, Providence, RI 02912, and Martin Dindos. *Boundary value problems for elliptic complex coefficient divergence form operators.*

Let $L = \operatorname{div} A \nabla$ be a second order elliptic operator, where A is a matrix of bounded measurable complex-valued functions. The concept of *p*-ellipticity, introduced by Cialdea and Mazya, and further refined by Carbonaro and Dragičević, allows us to prove higher integrability and regularity of solutions, via a Moser iteration argument. We then consider Dirichlet, regularity, and perturbation theory for *p*-elliptic operators. (Received February 19, 2018)