

# Relations between elliptic equations in the divergence and non-divergence form

L. D'ONOFRIO

## Abstract

We investigate relations between the structure properties of elliptic equations in divergence and non-divergence form in the plane. As an application, we give an estimate for the second order derivatives of solutions of nondivergence elliptic equations  $Tr(A \nabla^2 w) = h$ , where  $A \in R^{2 \times 2}$  is a symmetric matrix such that  $\sqrt{K^{-1}(x)}I \leq A(x) \leq \sqrt{K(x)}I$  and  $K(x)$  satisfies an exponential integrability condition.