Schwarz symmetrization in nonlinear elliptic problems with lower-order terms F. DELLA PIETRA

Abstract

In this paper we consider the homogeneous Dirichlet problem for a class of nonlinear elliptic equations of the form

$$A(u) = H(x, u, Du) + g(x, u),$$

where the principal term is a Leray-Lions operator defined on $W_0^{1,p}(\Omega)$. The functions g(x, u) and H(x, u, Du) satisfy suitable growth conditions. We prove a comparison result between the decreasing rearrangement of u and the decreasing rearrangement of the solution of a problem data are radially symmetric.