

Elliptic problems with variable exponent and nonhomogeneous Neumann conditions

Giuseppina D'Agù

DICIEAMA, University of Messina, Italy

dagui@unime.it

The problems with $p(x)$ –growth conditions arise from the analysis of some specific fluids called electrorheological. The necessary framework for the study of these problems is represented by the function spaces with variable exponent $L^{p(x)}(\Omega)$ and $W^{m,p(x)}(\Omega)$. In this talk, we present some results on the existence of an unbounded sequence of weak solutions for a class of differential equations with $p(x)$ -Laplacian and subject to small perturbations of nonhomogeneous Neumann conditions.