

# Weak solutions for a class of higher-order PDEs

Maria-Magdalena Boureanu

*Department of Applied Mathematics, University of Craiova, Romania*

e-mail: [mmboureanu@yahoo.com](mailto:mmboureanu@yahoo.com)

We are concerned with the weak solvability of a class of fourth-order elliptic problems involving variable exponents. In the qualitative study of PDEs, the impact of an exponent that varies has been intensively investigated over the last decades, but the interest in variable exponent problems of fourth-order is much more recent. We continue this fresh line of research and we rely on the critical point theory to obtain existence and multiplicity results for our problem.