Existence and Uniqueness for some Non-Resonant Quasilinear Elliptic Systems with Variable Exponents

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In this paper, we study the solvability to the left of the first eigenvalue for some non- resonant quasilinear elliptic problems involving variable exponents. We first prove the existence of at least a weak solution for some non-variational systems by using a surjectivity result for pseudomonotone operators. Furthermore, under additional conditions, we show that the solution is unique. Secondly, we deal with non-resonant related equations and obtain existence and uniqueness results by using a variational approach.

References:

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