Quasilinear elliptic systems with critical Sobolev exponents in $\mathbb{R}^{N}$*

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Abstract

We study here a class of quasilinear elliptic systems involving the p-Laplacian operator; the right hand side of systems is closely related to the critical Sobolev exponents. Under some additional assumptions on the nonlinearities, the corresponding functional verifies the Palais-Smale condition $(PS)_c$ for c belonging to a specified range. So, we can use the Mountain Pass Theorem to prove the existence of at least one nontrivial solution.

*oral communication.