EXISTENCE OF NONTRIVIAL SOLUTIONS TO SUPERLINEAR $p$-LAPLACIAN EQUATIONS

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Abstract

We consider a $p$-Laplacian equation on a bounded domain in $\mathbb{R}^N$, where the nonlinearity is superlinear, but does not satisfy the usual Ambrosetti-Rabinowitz growth condition. To overcome the difficulty that the Palais-Smale sequences of the functional may be unbounded, we consider the Cerami sequences.

Keywords and phrases: $p$-Laplacian, superlinear Cerami condition, symmetric mountain pass theorem.

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References


