

# A multiplicity result for a class of equations of p-Laplacian type with sign-changing nonlinearities

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Abstract: Using variational arguments we study the non-existence and multiplicity of non-negative solutions for a class equations of the form  $-\operatorname{div}(a(x, u)) = \lambda f(x, u)$  in  $\Omega$ , where  $\Omega$  is a bounded domain in  $\mathbb{R}^N$ ,  $N \geq 3$ ,  $f$  is a sign-changing Carathéodory function on  $\Omega \times [0, +\infty)$  and  $\lambda$  is a positive parameter. © 2009 Glasgow Mathematical Journal Trust.

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