

[Anane, A.](#); [Chakrone, O.](#)

**On a problem of lower limit in the study of nonresonance.** (English) Zbl 0933.35067  
Abstr. Appl. Anal. 2, No. 3-4, 227-237 (1997).

Summary: We prove the solvability of the Dirichlet problem

$$\begin{cases} -\Delta_p u = f(u) + h & \text{in } \Omega, \\ u = 0 & \text{on } \partial\Omega \end{cases}$$

for every given  $h$ , under a condition involving only the asymptotic behaviour of the potential  $F$  of  $f$  with respect to the first eigenvalue of the  $p$ -Laplacian  $\Delta_p$ . More general operators are also considered.

**MSC:**

[35J65](#) Nonlinear boundary value problems for linear elliptic equations

[35P30](#) Nonlinear eigenvalue problems and nonlinear spectral theory for PDEs

[35A25](#) Other special methods applied to PDEs

**Keywords:**

$p$ -Laplacian; nonresonance; first eigenvalue

**Full Text:** [DOI](#) [EuDML](#) [Link](#)