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NONTRIVIAL SOLUTIONS OF p-SUPERLINEAR p-LAPLACIAN PROBLEMS VIA A COHOMOLOGICAL LOCAL SPLITTING

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Abstract. We consider a quasilinear equation, involving the p-Laplace operator, with a p-superlinear nonlinearity. We prove the existence of a nontrivial solution, also when there is no mountain pass geometry, without imposing a global sign condition. Techniques of Morse theory are employed.