GROUND STATE SOLUTION OF A NONCOOPERATIVE ELLIPTIC SYSTEM

Cyril Joel Batkam

Abstract. In this paper, we study the existence of a ground state solution, that is, a non trivial solution with least energy, of a noncooperative semilinear elliptic system on a bounded domain. By using the method of the generalized Nehari manifold developed recently by Szulkin and Weth, we prove the existence of a ground state solution when the nonlinearity is subcritical and satisfies a weak superquadratic condition.


Keywords and phrases: Ground state, noncooperative elliptic system, generalized Nehari manifold, variational method.

REFERENCES