

GROUND STATE SOLUTION OF A NONCOOPERATIVE ELLIPTIC SYSTEM

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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.

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