

Multiplicity of positive solutions for weakly coupled nonlinear Schrödinger systems *

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Abstract

This article is concerned with the application of variational methods in the study of positive solutions for a system of weakly coupled nonlinear Schrödinger equations in the Euclidian space. The results on multiplicity of positive solutions are established under the hypothesis that the coupling is either sublinear or superlinear with respect to one of the variables. Conditions for the existence or non existence of a positive least energy solution are also considered.

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