Seminário de Análise

Positive ground states for a subcritical and critical coupled system involving Kirchhoff-Schrödinger equations

José Carlos de Albuquerque
Universidade Federal de Goiás

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Abstract. In this paper we prove the existence of positive ground state solution for a class of linearly coupled systems involving Kirchhoff-Schrödinger equations. We study the subcritical and critical case. Our approach is variational and based on minimization technique over the Nehari manifold. We also obtain a nonexistence result using a Pohozaev identity type. This is a joint work with J. M. do Ó (UnB) and G. M. Figueiredo (UnB).

References

[1] C.O. Alves, G.M. Figueiredo, *Nonlinear perturbations of a periodic Kirchhoff equation in $\mathbb{R}^N$*, Nonlinear Anal. **75**, (2012) 2750–2759.

[2] D. Lü, J. Xiao, *Ground state solutions for a coupled Kirchhoff-type system*, Math. Methods Appl. Sci., **38** (2015), 4931–4948.

[3] H. Shi, H. Chen, *Ground state solutions for asymptotically periodic coupled Kirchhoff-type systems with critical growth*, Math. Methods Appl. Sci. **39** (2016), 2193–2201.

[4] X.H. Tang, S. Chen, *Ground state solutions of Nehari-Pohozaev type for Kirchhoff-type problems with general potentials*, Calc. Var. **56** (2017), 25pp.