Seminario de Matemática Aplicada

Departamento de Matemática Aplicada

Instituto de Matemática Interdisciplinar

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Concentration phenomena in some nonlinear elliptic equations

Abstract

We construct solutions of some nonlinear elliptic equations which are concentrated in certain points of their respective domains. By means of the Lyapunov-Schmidt reduction method: we reduce our work to that of finding critical points of an associated function with a variational formulation of each problem, wich depends of certain parameters and points of the domain where finally the concentration take place. Depending on the considered equation, multi-peak, multi-bump or bubble-tower solutions are found.

Organizado por el Departamento de Matemática Aplicada y el Instituto de Matemática Interdisciplinar con la colaboración del grupo de investigación MOMAT.

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