

Heteroclinic connections for third order equations

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We deal with the existence of heteroclinics for the third order differential equation $u''' = f(u) + p(t)u'$. We study the case where f and p are even as well as the non-symmetric case and we also present an uniqueness result. Our main tools are an approximation procedure together with the Leray-Schauder degree.

This talk is based on joint work with D. Bonheure, C. De Coster and L. Sanchez.

References

- [1] D. Bonheure, J. A. Cid, C. De Coster and L. Sanchez, Heteroclinics for some non autonomous third order differential equations, *to appear in Topol. Methods Nonlinear Anal.*