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EXISTENCE OF HOMOCLINIC SOLUTIONS FOR SECOND ORDER HAMILTONIAN SYSTEMS UNDER LOCAL CONDITIONS

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Abstract. Under some local conditions on $V(t,x)$ with respect to x, the existence of homoclinic solutions is obtained for a class of the second order Hamiltonian systems $\ddot{u}(t)+\nabla V(t,u(t))=f(t)$, $\forall t\in\mathbb{R}$.

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