

## PERIODIC AND SUBHARMONIC SOLUTIONS FOR A CLASS OF SUPERQUADRATIC FIRST ORDER HAMILTONIAN SYSTEMS

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*Abstract.* In this paper, we investigate the existence of periodic and subharmonic solutions for the first order Hamiltonian systems. By virtue of auxiliary functions, we obtain some kinds of new superquadratic growth conditions. Using the minimax methods in critical point theory, several new existence and multiplicity theorems are established.

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