
ALMOST AUTOMORPHIC AND PSEUDO ALMOST PERIODIC BEHAVIOR OF DAMPED EULER–LAGRANGE EQUATIONS.

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ABSTRACT

This research investigates whether certain types of generalized periodic solutions—specifically almost automorphic and pseudo-almost periodic—exist within damped Euler-Lagrange equations. To find these solutions, the authors use a variational approach combined with the properties of Nemytskii operators. The study covers both: Autonomous systems (where the rules don't change over time) and non-autonomous systems (which include external forcing factors)

Keywords Almost-Automorphic function, Pseudo-Almost Periodic function, Euler-Lagrange equation, variational problems.

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