

Travelling waves in time almost periodic structures governed by bistable nonlinearities. II. Existence

Wenxian Shen *
Department of Mathematics
Auburn University
Auburn University, AL 36849

Abstract

The current series of two papers is concerned with traveling wave solutions of time almost periodic nonlinear evolution equations. In the first of the series, we introduced the definition of almost periodic traveling wave solutions and established the stability and uniqueness of such solutions for time almost periodic bistable equations in one space dimension. In the second of the series, we prove the existence of such solutions for time almost periodic bistable equations with continuous space variables. We also consider the existence of traveling wave solutions and occurrence of propagation failure and spatial chaos in bistable equations with discrete space variables.

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