

Original Articles

# Attractors and Dimensions for Discretizations of a Dissipative Zakharov Equations

Qian Shun CHANG(1), Bo Ling GUO(2)

(1)Institute of Applied Mathematics, Academy of Mathematics and System Sciences, Chinese Academy of Sciences;(2)Institute of Applied Physics and Computational Mathematics

收稿日期 修回日期 网络版发布日期 接受日期

**摘要** In this paper, a dissipative Zakharov equations are discretized by difference method. We make prior estimates for the algebraic system of equations. It is proved that for each mesh size, there exist attractors for the discretized system. The bounds of the Hausdorff dimensions of the discrete attractors are obtained, and the various bounds are dependent of the mesh size.

**关键词** [Attractor](#) [dissipative Zakharov equation](#)

分类号

## Attractors and Dimensions for Discretizations of a Dissipative Zakharov Equations

Qian Shun CHANG(1), Bo Ling GUO(2)

(1)Institute of Applied Mathematics, Academy of Mathematics and System Sciences, Chinese Academy of Sciences;(2)Institute of Applied Physics and Computational Mathematics

**Abstract** In this paper, a dissipative Zakharov equations are discretized by difference method. We make prior estimates for the algebraic system of equations. It is proved that for each mesh size, there exist attractors for the discretized system. The bounds of the Hausdorff dimensions of the discrete attractors are obtained, and the various bounds are dependent of the mesh size.

**Key words** [Attractor](#) [dissipative Zakharov equation](#)

DOI:

通讯作者 Qian Shun CHANG [cqs@amath8.amt.ac.cn](mailto:cqs@amath8.amt.ac.cn)

### 扩展功能

本文信息

▶ [Supporting info](#)

▶ [PDF\(0KB\)](#)

▶ [\[HTML全文\]\(0KB\)](#)

▶ [参考文献](#)

服务与反馈

▶ [把本文推荐给朋友](#)

▶ [加入我的书架](#)

▶ [加入引用管理器](#)

▶ [复制索引](#)

▶ [Email Alert](#)

▶ [文章反馈](#)

▶ [浏览反馈信息](#)

相关信息

▶ 本刊中 包含“[Attractor](#)”的  
[相关文章](#)

▶ 本文作者相关文章

· [Qian Shun CHANG](#)

· [Bo Ling GUO](#)