

23(7)

Oscillation Theorems for Quasilinear Elliptic Differential Equations

徐志庭

广州市华南师范大学数学科学学院

收稿日期 2004-11-23 修回日期 网络版发布日期 2007-5-21 接受日期 2005-6-7

摘要

关键词 [oscillation](#) [quasilinear elliptic equation](#) [second order](#) [vector Riccati transformation](#)

分类号 [35B05](#)

Oscillation Theorems for Quasilinear Elliptic Differential Equations

Zhi Ting XU

Department of Mathematics, South China Normal University, Guangzhou 510631, P. R. China

Abstract By using vector Riccati transformation and averaging technique, some oscillation criteria for the quasilinear elliptic differential equation of second order, $\sum_{i,j=1}^N D_i[\Psi(y) A_{ij}(x)] |Dy|^{p-2} D_j \Psi(y) + p(x)f(y) = 0$, are obtained. These theorems extend and include earlier results for the semilinear elliptic equation and PDE with p -Laplacian.

Key words [oscillation](#) [quasilinear elliptic equation](#) [second order](#) [vector Riccati transformation](#)

DOI: 10.1007/s10114-005-0853-5

通讯作者 徐志庭 xztxhyj@pub.guangzhou.gd.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“[oscillation](#)”的
[相关文章](#)

▶ 本文作者相关文章

· [徐志庭](#)