

数学

四阶p-Laplacian中立型泛函微分方程周期解的

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摘要:

使用中立型算子的性质及Mawhin连续性定理, 研究四阶 p-Laplacian中立型泛函微分方程周期解的存在性. 在适当的假设条件下, 得到了该方程存在周期解的充分性条件.

关键词: 中立型泛函微分方程; p-Laplacian方程; Mawhin连续性定理; 周期解

Existence of Periodic Solutions for a Fourth Order p-Laplacian Neutral Functional Differential Equation

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Abstract:

In order to expand the researches of neutral functional differential equation, we studied a kind of periodic solutions to a fourth order p-Laplacian neutral functional differential equation. Under various assumptions, new results on the existence of periodic solutions were obtained via the theory of coincidence degree and some properties of the neutral operator.

Keywords: neutral functional differential equation p-Laplacian equation Mawhin continuation theory periodic solution

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