

Название публикации:

On power and non-power asymptotic behavior of positive solutions to Emden-Fowler type higher-order equations

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Сведения об издании:

Advances in difference equations

DOI: 10.1186/1687-1847-2013-220

Опубликовано: 2013

Тип документа: Article

Аннотация:

For the equation

$y^{(n)} = y^{(k)}, k > 1, n = 12, 13, 14,$

the existence of positive solutions with non-power asymptotic behavior is proved, namely

$y = (x^* - x)^{-\alpha} h(\log(x^* - x)), \alpha = n/k - 1, X < X^*,$

where X^* is an arbitrary point, h is a positive periodic non-constant function on \mathbb{R} .

To prove this result, the Hopf bifurcation theorem is used.

Ключевые слова:

Asymptotic behavior; Emden-Fowler higher-order equations