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## 广义神经传播方程的非协调变网格有限元方法

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### Nonconforming Finite Element Method for Generalized Nerve Conductive Equations on Moving Grids

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**摘要** 本文将Crouzeix-Raviart型各向异性非协调线性三角形元应用到广义神经传播方程, 建立了其Crank-Nicolson变网格逼近格式. 同时, 直接利用插值技巧和单元的特殊性质给出了相应的收敛性分析和最优误差估计.

**关键词:** 变网格 各向异性 插值技巧 Crank-Nicolson格式

**Abstract:** In this paper Crouzeix-Raviart type anisotropic nonconforming linear triangular element is applied to the generalized nerve conductive equations and the Crank-Nicolson approximation scheme of moving grids is established. At the same time, the convergence analysis and optimal error estimations are derived based on interpolation technique and special properties of the element.

**Key words:** moving grids anisotropy interpolation technique Crank-Nicolson scheme

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