论文

非定常Stokes方程的稳定化全离散有限体积元格式

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A STABILIZED FULLY DISCRETE FINITE VOLUME ELEMENT FORMULATION FOR NON-STATIONARY STOKES EQUATION

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- 摘要
- 参考文献
- 相关文章

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摘要

本文研究非定常Stokes方程的有限体积元方法,给出一种基于两个局部高斯积分的稳定化全离散格式,并给其有限体积元解的误差分析.

关键词： 非定常的Stokes方程   有限体积元格式   稳定化全离散格式   误差估计

Abstract：

In this paper, a finite volume element method for non-stationary Stokes equation is studied and a stabilized fully discrete finite volume element formulation based on on two local Gauss integrals for non-stationary Stokes equation is derived. The errors of solution for this formulation is analyzed.

Key words： non-stationary Stokes equation   finite volume element formulation   stabilized fully discrete formulation   error estimate

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