数学与系统科学研究院

计算数学所学术报告

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报告题目：

A P4 bubble enriched P3 divergence-free finite element on triangular grids

邀请人：　龚伟 副研究员

报告时间：**2017** 年 **8** 月 **9** 日（周三）

上午 **11:00-12:00**

报告地点：　科技综合楼三层

311 报告厅

Abstract:

On triangular grids, the continuous Pk plus discontinuous P(k-1) mixed finite element is stable for polynomial degree k greater than or equal to 4. When k is 3, the inf-sup condition fails and the mixed finite element converges at an order that is two orders lower than the optimal order. We enrich the continuous P3 by adding some P4 divergence-free bubble functions, to be exact, one P4 divergence-free bubble function each component each edge. We show that such an enriched P3-P2 mixed element is inf-sup stable, and converges at the optimal order.

欢迎大家参加！