数学与系统科学研究院
计算数学所学术报告

报告人：Associate Prof. Yanmin Zhao

（ *School of Mathematics and Statistics, Xuchang University* ）

报告题目：

High accuracy analysis of finite element approximate schemes for the nonlinear Schrödinger equation

邀请人： 唐贻发 研究员

报告时间：2015 年 8 月 25 日（周二）
晚上 19:00~20:00

报告地点： 数学院南楼七层
702 会议室

Abstract：

Two types of finite element approximate schemes are proposed for the nonlinear Schrödinger equation. Firstly, a new mixed finite element approximate formulation with less degree of freedom is established, which easily satisfies the B-B condition, and high accuracy analysis has been presented for both semi-discrete and fully-discrete schemes. Secondly, based on traditional finite element approximate schemes, the relationship between the Ritz projection and interpolation is established, and the superclose property of the interpolation is obtained, moreover the global superconvergence is derived by using of the interpolation post-processing technique. Finally, some novel finite element approximate schemes are discussed.

欢迎大家参加！