数学与系统科学研究院

计算数学所定期学术报告

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报告题目：

Monotone finite point method for non-equilibrium radiation diffusion equations

邀请人： 许学军 研究员

报告时间：2015 年 10 月 8 日（周四）

下午 16:00~17:00

报告地点： 科技综合楼三层

311 报告厅

Abstract：

In this talk, we propose the monotone tailored-finite-point method for solving the non-equilibrium radiation diffusion equations. We first give two tailored finite point schemes for the nonlinear parabolic equation in one-dimensional case, then extend the idea to solve the radiation diffusion problem in 1D as well as 2D. Our method satisfies the discrete maximum principle automatically, thus preserves the properties of monotonicity and positivity. Numerical results show that our method can capture the sharp front and can be accommodated to discontinues diffusion coefficient.

欢迎大家参加！