数学与系统科学研究院

计算数学所学术报告

(定期学术报告)

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报告题目：

Energy–preserving numerical algorithms for conservative PDEs

报告时间： 2008 年 1 月 10 日(周四)

下午 4:00—5:00

报告地点： 科技综合楼三层 311

计算数学所报告厅

Abstract：

Geometric numerical integrators are a kind of numerical methods which are presented for the differential systems with some

special structures, e.g. Hamiltonian structure, symmetries, phase space volume, the first integral etc. The advantage for this kind of numerical methods is that the qualitative behaviour of numerical solutions can be simulated exactly for a long time. Recently, the presentation of multi-symplectic geometry and multi-symplectic Hamiltonian systems provides the new way for the development of this idea in conservative PDEs. In this talk, focused on the equivalent formulation of PDEs, we establish the numerical algorithms which can preserve the energy or momentum of PDEs and present he numerical example.

欢迎大家参加！