

数学与系统科学研究院

计算数学所学术报告

报告人: **Prof. Dong Liang**

(*Department of Mathematics & Statistics,
York University, Canada*)

报告题目:

**Energy-conserved Numerical
Splitting Methods for
Electromagnetics in Metamaterials**

邀请人: **曹礼群 研究员**

报告时间: **2016 年 8 月 2 日 (周二)**

下午 16:00~17:00

报告地点: **数学院南楼七层**

702 会议室

Abstract:

Early in 1968, the concept of “metamaterial” has been first proposed by Veselago. Till 2000, the first negative index metamaterial was successfully constructed by Shelby and Smith. Due to their unusual physical properties that could not be found in natural materials, metamaterials have many important applications such as aerospace applications, aircraft radar, radio-frequency, microwave, antennas, medical imaging device, cloaking device, etc. In this talk, we will present our results on energy-conserved identities of electromagnetic energy in metamaterials and our developed energy-conserved splitting numerical methods in metamaterials. We will talk theoretical results on energy conservation, stability and convergence and will give numerical examples to show their performance. Applications will also be presented in the talk.

欢迎大家参加！