

1071-65-237

Jichun Li* (jichun@unlv.nevada.edu), Dept of Mathematical Sciences, University of Nevada Las Vegas, Las Vegas, NV 89154-4020, **Yunqing Huang** (huangyq@xtu.edu.cn), President's Office, Xiangtan University, Xiangtan, Hunan 411105, Peoples Rep of China, and **Wei Yang** (yangweixu@126.com), College of Mathematical Sciences, Xiangtan University, Xiangtan, Hunan 411105, Peoples Rep of China. *Interior penalty DG methods for Maxwell's equations in dispersive media.*

In this talk, we will introduce several interior penalty discontinuous Galerkin methods for solving the time-dependent Maxwell's equations in dispersive media. The model is described by a vector integro-differential equation. Numerical stability and error estimates will be discussed. Numerical results supporting the analysis will be presented. (Received March 07, 2011)