

1106-65-186

Yujie Zhang* (yjzhang@math.okstate.edu), Oklahoma State University, 401 Math Science, Stillwater, OK 74078. *Weak Galerkin Mixed Finite Element Method for Linear Elasticity Problems.*

In the talk, I will talk about solving linear elasticity problems by using Weak Galerkin mixed finite element method (WG-MFEM), which is a newly developed numerical method for solving partial differential equations. It is shown that WG-MFEM provides an accurate approximation for both the stress tensor and the displacement field of linear elasticity problems. The numerical experiments will be provided to verify that WG-MFEM is efficient and reliable in computing. (Received September 10, 2014)