

1038-65-349

Du X Pham* (pham@math.colostate.edu), 1209 W Plum st #C4, Fort Collins, CO 80521. *A posteriori error analysis of cell-centered finite volume method for convection diffusion problems with interface.* Preliminary report.

Finite volume methods are used largely by the engineers due to the local conservation properties and domain decomposition methods are designed to allow the effective of numerical solution of PDEs on parallel computers. In this talk, a posteriori error analysis for finite volume methods is carried out using the equivalent mixed finite element formulation for convection diffusion problems including ones with the coupling interface. (Received February 13, 2008)