

A Posteriori Error Estimation for Transport Equations

Tuesday, July 10, 2018 3:30 PM (30 minutes)

In this paper, we will consider a posteriori error estimation for the transport equation $\partial_t u + \mathbf{a}(x, t) \cdot \nabla u = 0$ with the initial data $u_0 \in L^\infty \cap BV_{\text{loc}}$ and the divergence of the velocity field \mathbf{a} is not equal to zero. An a posteriori estimate for the error between the exact solution and the solution of an upwind finite volume scheme is derived in the L^1 norm.

Primary author: Dr LE, Anh Ha (University of science, VNU-HCMUS)

Presenter: Dr LE, Anh Ha (University of science, VNU-HCMUS)