

Abstract Submitted
for the MAR09 Meeting of
The American Physical Society

A Front Tracking Algorithm for Liquid Jet Breakup WURIGEN BO, JAMES GLIMM, XINGTAO LIU — A numerical study of breakup of a high speed jet is presented using the Front Tracking method in 3D. A robust locally grid based method is applied to handle the topological change of the surface mesh in the simulation, the validation of the method is proved mathematically. Numerical results are presented for 3D simulation of the primary breakup of a liquid jet with turbulent inflow.

Wurigen Bo

Date submitted: 21 Nov 2008

Electronic form version 1.4