Abstract Submitted for the TSF14 Meeting of The American Physical Society

Implementation and testing of a hypersurface finder for event-byevent (3+1)D hydrodynamics STEVEN ROSE, RAINER FRIES, Texas A&M Univ — Hydrodynamic simulations of nuclear collisions can model the expansion and cooling of the fireball created in such collisions. Many applications require a fast and efficient algorithm to find and parameterize hypsersurfaces; e.g. the isothermal surface at the freeze-out temperature can be used to calculate a final distribution of particles in the collision via the Cooper-Frye procedure. An algorithm proposed by Pang, Wang, and Wang is evaluated and compared to standard algorithms in AZYHYDRO and Cornelius.

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Date submitted: 26 Sep 2014

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