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Two Dimensional Turbulence with a Driven Relativistic Lattice Boltzmann Model MARK WATSON, University of Colorado, Colorado Springs — We investigate a relativistic adaptation of the Lattice Boltzmann Method that reproduces the equations of motion for a turbulent relativistic hydrodynamic system. The classical Lattice Boltzmann method and it's extension to relativistic fluid dynamics is described. The numeric formulation is evaluated using a zero-averaged stirring force introduced into the numerics to induce turbulence, and the turbulent flow characteristics produced are compared to properties of a classical turbulent hydrodynamic flow.

Mark Watson
University of Colorado, Colorado Springs

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