## Abstract Submitted for the APR10 Meeting of The American Physical Society

## **A Numerical Study of Skyrmion Collisions** BENJAMIN GUTIER-REZ, Department of Physics and Astronomy, University of British Columbia — We

present results on numerical experiments on the relativistic scattering of skyrmions and domain walls in 2+1 and 3+1 dimensions. Parallel adaptive mesh refinement is implemented to study the collisions of spherically symmetric (hedgehog) skyrmion configurations. We investigate reported numerical instabilities and the hyperbolic nature of the system in the relativistic limit.

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