Abstract Submitted for the APR20 Meeting of The American Physical Society

**Near-field gravitational lensing with SpECTRE** WILLIAM THROWE, Cornell University, SXS COLLABORATION — The SpECTRE project (https://github.com/sxs-collaboration/spectre) is primarily focused on solving elliptic and hyperbolic PDEs using discontinuous Galerkin methods. We present progress in applying SpECTRE to a different type of problem: tracing geodesics through a known spacetime. We give particular emphasis to the application to near-field gravitational lensing by black hole systems.

William Throwe Cornell University

Date submitted: 10 Jan 2020

Electronic form version 1.4