Abstract Submitted for the APR18 Meeting of The American Physical Society

SpECTRE: A task-based discontinuous Galerkin code for relativistic astrophysics¹ LAWRENCE KIDDER, Cornell Univ, SIMULATING EXTREME SPACETIMES COLLABORATION — We provide an update on the development of SpECTRE (https://github.com/sxs-collaboration/spectre), a new open-source relativistic astrophysics code that combines a discontinuous Galerkin method with a task-based parallelism model. SpECTRE's goal is to achieve more accurate solutions for challenging relativistic astrophysics problems such as core-collapse supernovae and binary neutron star mergers, while making efficient use of the largest supercomputers.

¹We acknowledge support from NSF PHY-1606654 and the Sherman Fairchild Foundation

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Date submitted: 12 Jan 2018 Electronic form version 1.4