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Gravitational Collapse With Distributed Adaptive Mesh Refinement STEVEN LIEBLING, C.W. Post – Long Island University, LUIS LEHNER, PATRICK MOTL, Louisiana State University, DAVID NEILSEN, Brigham Young University, TANVIR RAHMAN, C.W. Post – Long Island University, OSCAR REULA, Universidad Nacional de Cordoba — Gravitational collapse is studied using distributed adaptive mesh refinement (AMR). The AMR infrastructure includes a novel treatment of adaptive boundaries which allows for high orders of accuracy. Results of the collapse of Brill waves to black holes are presented. Combining both vertex centered and cell centered fields in the same evolution is discussed.

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