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**Visualization of a Numerical Simulation of GW 150914** NICOLE ROSATO, JAMES HEALY, CARLOS LOUSTO, Rochester Institute of Technology — We present an analysis of a simulation displaying apparent horizon curvature and radiation emitted from a binary black hole system modeling GW-150914 during merger. The simulation follows the system from seven orbits prior to merger to the resultant Kerr black hole. Horizon curvature was calculated using a mean curvature flow algorithm. Radiation data was visualized via the  $\Psi_4$  component of the Weyl scalars, which were determined using a numerical quasi-Kinnersley method. We also present a comparative study of the differences in quasi-Kinnersley and PsiKadela tetrads to construct  $\Psi_4$ . The analysis is displayed on a movie generated from these numerical results, and was done using VisIt software from Lawrence Livermore National Laboratory. This simulation and analysis gives more insight into the merger of the system GW 150914.

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