**Scheme for Implementing Axisymmetry Using a Multipatch Setup in Numerical Relativity** JERRED JESSE, Washington State Univ — With the observation of a kilonova signal following the detection of the binary neutron star merger GW170817, the need for an extended duration simulation of the post-merger environment has become important in order to determine the effects of the stability of the remnant on the observed signal. In order to extend simulation times in the Spectral Einstein Code (SpEC), we have developed a modification to SpEC's multipatch coordinate transformation implementation to allow for easily running a post-merger simulation in axisymmetry. Several tests using simple equilibrium systems both without and with added magnetic fields have shown the viability of this method and demonstrated a significant decrease in required computational resources versus a full 3D simulation.

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