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LazarusII: Applying the Quasi-Kinnersley Frame to Numerical Evolutions BERNARD KELLY, CARLOS LOUSTO, MANUELA CAMPANELLI, CGWA, University of Texas at Brownsville — The Lazarus project was designed to make the most of limited 3D black-hole simulations, through the identification of radiation at late times, and subsequent evolution of the Weyl scalar Ψ_4 through the Teukolsky formulation. We report on new developments in Lazarus, employing the concept of the "quasi-Kinnersley" frame to analyze late-time numerical space-times that we suspect differ only slightly from Kerr. This allows us to extract unambiguous information about the "background" Kerr solution, and through this, to identify the radiation present. These techniques will enable us to validate previous Lazarus results, and to resolve some, if not all, of the coordinate uncertainties encountered in interpreting the results of black-hole simulations.

Bernard Kelly
CGWA, University of Texas at Brownsville

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