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2-Body Einstein-Infeld-Hoffman Equations from Boosted Schwarzschild Black Holes MICHAEL IAN VEGA, Department of Physics, University of Florida — We present an elementary derivation of the 2-body EIH equations, which are 1-PN accurate equations of motion for a sufficiently separated binary system of non-spinning black holes. The 3-acceleration of one black hole is calculated by writing down the geodesic equation in the boosted geometry of the other black hole up to the appropriate post-Newtonian order. Harmonic coordinates are used for the locally inertial frames around each of the black holes and for the flat global background.

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