Finding Fields and Self-Force in a Gauge Appropriate to Separable Wave Equations II[1] TOBIAS KEIDL, University of Wisconsin–Milwaukee, JOHN FRIEDMAN, DONG-HOON KIM, EIRINI MESSARITAKI, LARRY PRICE, ALAN WISEMAN — Gravitational waves from the inspiral of a stellar-sized black hole in to a supermassive black hole are an important source for the Laser Interferometer Space Antenna. A method for computing self force has been proposed that uses regularizes solutions of the Teukolsky equation [1]. The prescription is outlined in the previous talk. In this talk, I focus on computational details for a particle in circular orbit in a Schwarzschild spacetime.
[1] T. S. Keidl, J. L.Friedman, and A. G. Wiseman, Phys. Rev. D. **75**, 124009 (2007); gr-qc/0611072.

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Date submitted: 11 Jan 2008   Electronic form version 1.4