

Abstract Submitted
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Elastic body motion in General Relativity NISHITA JADOO, J. DAVID BROWN, North Carolina State University — We investigate a general relativistic formulation of elastic theory. The elastic body has negligible self-force and moves in a background space time metric. We solve the equations of motion for the case of a compact isotropic elastic body with free surface boundary conditions near a Schwarzschild black hole. We observe the deformations of the elastic body and look at possible deviations of its motion from a geodesic path.

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