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Effect of Large Masses on Particle-Particle Interactions TOMMIE DAY, ERIN DE PREE, St. Mary's College of Maryland — Interactions between particles are governed by the Lagrangian which depends on the trace of the metric of local spacetime. Particle-particle interactions near massive objects will depend on the mass, angular momentum, and charge of the object. We explore and compare interactions in flat spacetime with those in a Schwarzschild metric for spin-0 and spin-1/2 particles through computational simulation.

Tommie Day St. Mary's College of Maryland

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