The speed of gravitons in two-slit diffraction

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Single-particle two-slit diffraction is one of the mysteries of quantum mechanics; the particle cannot go through just one slit. However, in quantum electrogravity (QEG) the particle does go through just one slit. In QEG, the particle creates a graviton shower, the particle goes through one slit, the gravitons go through both slits, and reference frame interference ensues. To ensure interference, the shower gravitons must have a range of speeds, with some moving slower than the particle and some moving faster. If the particle is a photon, then some of the gravitons must move faster than the photon. This is possible in QEG because of the properties of the three kinds of QEG gravitons: a scalar graviton, a vector graviton, and a matrix graviton. The scalar and vector gravitons have field equations that go as d/dt (i.e. diffusive or Schrödinger-like), while the matrix graviton's field equation goes as d/dt^2 (i.e. wavelike or Klein-Gordon-like). The field equations allow gravitons to propagate slower than photons or faster than photons. In vacuo, the field equations for the three gravitons become singular; they form a bound state that propagates at the same speed as a photon. This explains experiments that have measured gravity propagating at the speed of photons.

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