

On graviton emission, and the variability of the gravitational interaction strength

S. Halayka*

January 28, 2019

Abstract

The emission of gravitons by a mass is considered.

1 On graviton emission

By default, especially in weak gravitational fields, a mass is an omnidirectional graviton emitter. However, if one is to increasingly gravitationally stimulate a mass, then the stimulation will eventually turn that mass from an omnidirectional graviton emitter into a unidirectional graviton emitter. The strength of the gravitational interaction would increase by a factor of c^2 , because the gravitational field (a bunch of gravitons) would be compactified from a 3+1D field down to a 1+1D beam. A unidirectional graviton emitter would be like a GASER (the gravitational analogue of the electromagnetic LASER).

To conclude: a mass reciprocates gravitons in the direction of gravitational stimulation, *in spite of* the mass's usual omnidirectional graviton emission. This effect strengthens the gravitational interaction. When the mass's graviton emission becomes fully unidirectional, the interaction strength will have increased by a factor of c^2 .

References

- [1] Fontana G. Possible Graviton Transitions and Gaser Action in High-Tc Superconductors – <https://arxiv.org/abs/cond-mat/0208276>
- [2] Fontana G. Design of a Quantum Source of High-Frequency Gravitational Waves (HFGW) and Test Methodology – <https://arxiv.org/abs/physics/0410022>

*sjhalayka@gmail.com