graviton

In physics, the **graviton** is an hypothetical elementary particle that mediates the force of gravitation in the framework of quantum field theory. If it exists, the **graviton** is expected to be massless (because the gravitational force appears to have unlimited range) and must be a spin-2 boson. The spin follows from the fact that the source of gravitation is the stress–energy tensor, a second-rank tensor (compared to electromagnetism's spin-1 photon, the source of which is the four-current, a first-rank tensor). Additionally, it can be shown that any massless spin-2 field would give rise to a force indistinguishable from gravitation, because a massless spin-2 field must couple to (interact with) the stress–energy tensor in the same way that the gravitational field does. Seeing as the **graviton** is hypothetical, its discovery would unite quantum theory with gravity. This result suggests that, if a massless spin-2 particle is discovered, it must be the **graviton**, so that the only experimental verification needed for the **graviton** may simply be the discovery of a massless spin-2 particle. Graviton, Wikipedia

See Also

Air-ship
Gravism
Gravitation
Gravity
Levitation
Newton of the Mind