
GR 204: Alternative klassische Gravitationstheorie

Zeit: Dienstag 16:00–16:15

Raum: KIP Kl. HS

GR 204.1 Di 16:00 KIP Kl. HS

Gravity as a Side Effect of Other Forces — ●ALBRECHT GIESE
— Taxusweg 15, 22605 Hamburg

In present physics, gravity is understood to be the 4th force in the set of physical forces. This assumption, however, has lead to irresolvable problems like the unresolved quantum gravity, the Pioneer anomaly etc.

If we follow an idea of Roman Sexl, that gravity can be understood as a refraction process, we find that the deflection of light passing the sun is quantitatively explained by refraction. If refraction is applied to the internal oscillation inside an elementary particle as it was detected by Schrödinger in 1930 ('zitterbewegung'), we end up with Newton's gravity.

If the refracted oscillation is now extended to relativistic objects we get the Schwarzschild formalism for the planetary system. Further on the equivalence principle can now be derived from basic assumptions, rather than being used as a basic assumption itself.

The cause of the refraction is the reduction of 'c' in a gravitational field. This reduction is caused by the interaction of the particles, which oscillate at 'c', with the exchange particles of the strong interaction. So gravity turns out to be a side effect of the strong interaction. The problem of Quantum Gravity becomes obsolete as the strong interaction is completely covered by quantum mechanics.

In addition it turns out that gravity does not depend on the mass of an object. This also resolves the dark matter problem.

For details refer to www.ag-physics.org/gravity