GR 25: Classical theory of General Relativity IV

Time: Friday 10:30–10:50   Location: SPA SR220

GR 25.1   Fri 10:30   SPA SR220

Fireballs of GRBs derived from Lorentz-Interpretation (LI) of GRT — ●Jürgen Brandes — Karlsbad, Germany

LI of GRT expands GRT [1]. Counterarguments [2]. Main differences with GRT though using the same formulas: (a) Free falling particles decrease their rest mass, loose it when reaching the event horizon and because of that become a wave, s. formula $E = mc^2 \sqrt{(1 - 2GM/c^2 r)}$ of [2]. This means: While Higgsfields *give* elementary particles a rest mass, gravitational fields *take* rest mass *away*. (b) Gravitational fields only exist if there are particles with rest mass $\neq 0$.

Assume a collapsing dust star reaching the event horizon. Then, using (a) and (b) all the particles loose their rest mass, become waves and all together form an expanding fireball with zero rest mass at $t = 0$. This is the (over)simplified idea of fireballs of GRBs seen by LI and needs more explanation in the talk. Some details s. [2].

[1] J. Brandes, J. Czerniawski: *Spezielle und Allgemeine Relativitätstheorie für Physiker und Philosophen - Einstein- und Lorentz-Interpretation, Paradoxien, Raum und Zeit, Experimente*, 4. Aufl. 2010 p. 316 ff, [2] Website www.grt-li.de