GR 10: Alternative Ansätze

Zeit: Mittwoch 16:30–18:10   Raum: SFG 0150

GR 10.1   Mi 16:30   SFG 0150

The color of stars vs. the time dilation — •Shukri Klinaku — University of Prishtina, Kosovo

In 1842 Christian Doppler explaining the color of binary stars found the "wave-length Doppler effect". The "frequency Doppler effect" is also well-known. Analogously, we can successfully define the "energy Doppler effect", and the "time Doppler effect". We know that the color of stars changes for the observer on Earth, while for an observer in frame of reference on the star doesn't change. So the increasing and decreasing of frequency; the extension and contraction of wavelength; the increasing and decreasing of radiation energy; and the period dilation and period contraction are symmetric and they are dependent on relative velocity between the velocity of light (c) and velocity of its source (v). Thus if we want to express these changes (color, frequency, wavelength or radiation energy) in terms of time, then we use the "time Doppler effect", that means the change of the period of receiving signals. In other words, the time interval in the frame of moving source within n periods of emission (nTs) is quite equal to the time interval in the frame of observer on Earth which contains the same number n of the same periods: $n(T_o + T_s v/c)$, where the second term in the sum inside brackets represents the time within which the first signal (from n signals) arrives to the observer. The story about the "length contraction" and "time dilation" overs here. The most tragic moment in all modern physics is the misinterpretation of the change of wavelength as "length contraction" and the misinterpretation of the change of periods as "time dilation".

GR 10.2   Mi 16:50   SFG 0150

Gravity Based on Lorentz's instead of Einstein's Theory of General Relativity — •Albrecht Giese — Taxusweg 15, 22605 Hamburg

Einstein developed his theory of relativity as a purely geometric system. In contrast to his approach, Hendrik Lorentz developed a physics-related relativity. However, Lorentz had to make some assumptions which were considered very speculative at the time, and so he had little chance of holding his ground against Einstein's geometry. In the meantime, however, the Lorentzian approach conforms to our understanding of physics. It exhibits great advantages, physically and with respect to understandability, compared to Einstein's.

Lorentz in his day only developed special relativity. However general relativity can also be developed based on Lorentz's physics-related approach. The result is a theory which fulfils all known proofs for Einstein's GRT and is in addition much easier to handle: no 4-dimensional Riemannian geometry is needed; school mathematics is sufficient. And the big open problems of dark matter and dark energy have solutions corresponding to a straightforward physical explanation and complying fully with other physical domains.

Further Info: www.ag-physics.org/gravity

GR 10.3   Mi 17:10   SFG 0150

Eine analytisch begründete Ursache der Gravitation — •Hans Körber — Kiel, Deutschland

Eine fast triviale Feststellung: Atome (und Moleküle) wirken in ihrer Umgebung elektrisch nicht neutral, weil sich ihre Elektronen und Protonen nicht am selben Ort befinden und sich diese zudem auf verschiedenen Radien bewegen. Die auf Bohrschem Radius (bzw Vielfachem davon) kreisenden Elektronen erzeugen wesentlich größere magnetische Momente als die ums Baryzentrum mitbewegten Protonen. Jedes Atom (und Molekül) besitzt daher einen magnetischen Dipol. In riesigen Feldansammlungen sind die extrem vielen Einzeldipole isoliert betrachtet zumeist chaotisch ausgerichtet und in der Summe daher unmagnetisch. Doch zu anderen Feldanhäufungen richten sich einige, genügend Dipole wegen der Fernwirkung aus, so daß die Feldhaufen (Substanzen) einander magnetisch anziehen: Sie gravitieren miteinander - es ist eine Schwerkraft vorhanden. „Es ziehen sich Massen an." Nähern sich die Substanzen, nimmt die Zahl der zueinander ausgerichteten Dipole zu. Die „Gravitationskonstante" ist somit keine.

GR 10.4   Mi 17:30   SFG 0150

Galilean relativity with relativistic gamma factor — •Osvaldo Domann — Stephanstr. 42, D- 85077 Manching

SR as derived by Einstein is the product of an approach of 1905 when the interactions between light and the measuring instruments were still not well understood. SR is a rough undifferentiating heuristic approach which omits the origin of the constancy of light speed in inertial frames, arriving to wondrous results about time and space. With the findings made during the last 100 years by experimentalists, a critical revision of Einstein*s theoretical approach is more than overdue. Based on these findings, a theoretical approach is presented which takes into consideration the interactions between light and optical lenses and electric antennas of the measuring instruments, explaining why always *c* is measured in the frame of the instruments. Relativity is treated as a speed problem with absolute time and space variables resulting equations of Galilean relativity multiplied with the Gamma factor. GR is the theory of gravitation of the SM and is based on time and space distortions and consequently a revision is also needed. An approach is also presented for gravitation based on the reintegration of migrated electrons and positrons to their nuclei. More at www.odomann.com

GR 10.5   Mi 17:50   SFG 0150

The gravitation and the Theory of Everything. — •Norbert Sadler — Wasserburger Str. 25a ; 85540 Haar

It can be shown that the algebra of the Exzeptional E8- Symmetry Group is an appropriate, dynamic gauge symmetry and that the gravitation can be understood as curvature of the entropy S(Univ.) of the universe.

From these findings there will be first disclosed a Theory of Everything T.O.E. in which the gravitaion, the cosmic Order-Parameter as well as the elementary particles are correctly described and understood.

The Theory of Everything:

alfa(gravitation) x (E8 x E8)=(S(Univ.) x S(Univ.)). with: Algebra(E8)=8.61x10**17; S(Univ.)=0.00664.

Acording to the above T.O.E. the curvature of the four dimensional spacetime of the ART is replaced by the curvarture of the entropy of the universe S(Univ.). There is no four dimensional spacetime and therefore are no problems with the singularities.

Further Information: www.cosmology-harmonices-mundi.com