

MP 12: Posters (Montag - Donnerstag)

Zeit: Montag 12:00–12:00

Raum: Z6 - SR 1.012

MP 12.1 Mo 12:00 Z6 - SR 1.012

- Tri-Graphs - The fundament to compute the physical constants — ●TAKIZAKI ZEN — Synspike Lab GmbH Schmickstraße 18, 60314 Frankfurt

Tri-Graphs describe by binary Graphs with the in mum nodes equal three and the logical operations Boolean and, no and xor a way to calculate the physical constants in unitary units. What is the definition of it?

MP 12.2 Mo 12:00 Z6 - SR 1.012

Emission & Regeneration UFT. — ●OSVALDO DOMANN — Stephanstr. 42, D- 85077 Manching

The SM defines for each force a different field resulting the electric, magnetic, weak, strong and gravitation fields. A theory is presented based on a space-like representation of Subatomic Particles (SPs) as Focal Points of rays of Fundamental Particles (FPs) that extend over the whole space. The FPs store the energy of the SPs as rotations defining angular momenta, allowing the description of the interactions between SPs as the interactions between the angular momenta of their FPs. All SPs interact permanently so that the local physical laws are determined by the large-scale structure of the universe according to Ernst March's principle. The main finding of the approach is that many concepts introduced by the SM like gluons, gravitons, dark mater, dark energy, expansion of the universe, equivalence principle, etc. are the

product of the incorrect representation of SPs. The approach derives all four known forces as electromagnetic interactions validating QED and disproving QCD and Gauge/Gravitation Duality. Another important finding is the interaction of light with the measuring instruments, which together with the emission of light with speed 'c' relative to its source and absolute time and space, leads to Galilean relativity multiplied with the gamma factor. No unphysical concepts like time dilation and length contraction are required. More at www.odomann.com

MP 12.3 Mo 12:00 Z6 - SR 1.012

Rotating Isospectral Drums - on the intricate relationship of constitutive equations and boundary conditions — ●ANTON LEBEDEV — Institut für Theoretische Physik, Tübingen, Deutschland

The majority of laws in physics is formally expressed in the form of (partial) differential equations (PDEs). Each differential equation remains incomplete without initial or boundary conditions.

Using Maxwell's equations and rotating planar domains I endeavour to highlight the intimate relationship between PDEs and boundary conditions. The necessity of the general covariant formulation of the laws of electrodynamics when dealing with accelerated motion will be highlighted. This will be used to derive of a Coriolis-Zeeman addendum to the wave equation for rotating ring resonators. All of the above will be done using the examples of isospectral domains and planar ring resonator models. Furthermore the use of the Coriolis-Zeeman term for a geometric classification of planar domains will be discussed.