T 2: Other Topics

Time: Monday 16:00–16:15 Location: Tb

T 2.1 Mon 16:00 Tb

A Particle Model that Yields a Bunch of Solutions — •Albrecht Giese — Taxusweg 15, 22605 Hamburg

We will present a particle model which differs considerably from that used in present-day physics but yields important benefits compared to the latter.

The essential difference is that every fermion is considered to be made of two sub-particles which are massless and orbit each other at the speed of light. The mass of the overall particle is caused by the fundamental physical fact that every extended object inevitably has inertia.

The particle model is in no conflict with experimental results since this type of configuration has never been tested. The fairly simple formula for mass does not have any adjustable parameters, but it yields the mass of e.g. an electron to within 3*10**-6 of the measurement.

The model assumes that the constituents are bound by the strong force. The shape of the force field is such that the bond depends critically on the conformity of the particles' sizes. This explains why e.g. leptons and quarks do not interact noticeably through the strong force; and also why different types of quarks do not normally interact.

The model further allows the quantitative deduction of particle properties such as the Bohr magneton, the magnetic anomaly, the energy to frequency relation and the fine structure constant alpha, as well as the constancy of spin. And it provides the fundamental causes of special as well as general relativity.

Introductory information on: www.ag-physics.org/rmass