LECTURES ON THE STANDARD MODEL OF PARTICLE PHYSICS
by
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UNIVERSITY OF CAPE TOWN, DEPARTMENT OF PHYSICS, & CENTRE FOR THEORETICAL & MATHEMATICAL PHYSICS

Ten 60 minutes lectures on the Standard Model of Particle Physics, to take place daily at 15:00, at the RW James Building, UCT.

The titles of the lectures are: 1. Quantum Mechanics, the Dirac equation, and gauge theories. 2. Isospin and SU(3) symmetries. 3. Spontaneous symmetry breaking. 4. Electroweak gauge theory. 5. Flavour mixing of quarks and leptons, CP violation. 6. QCD. 7. QCD and the naive quark model. 8. Grand Unification. 9. Composite Models of Leptons and Quarks, and LHC Physics. 10. The fundamental constants of Nature.

Professor Harald Fritzsch, together with Murray Gell-Mann and Heinrich Leutwyler, proposed the correct theory of strong interactions among quarks and gluons: Quantum Chromodynamics. Professor Fritzsch is foreign member, and member of the international advisory committee of UCT’s Centre for Theoretical & Mathematical Physics.

ALL WELCOME (MINIMUM LEVEL OF LECTURES: MSc / PhD)

For more information contact the organizer at: Cesareo.Dominguez@uct.ac.za (021-6503353)

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