

Physikalisches Kolloquium

Werner Vogelsang, Universität Tübingen
»Exploring the proton's spin«

Einführung: D. Zeppenfeld

The exploration of the inner structure of the nucleon is a classic topic of nuclear and particle physics. Over the last two decades a particular focus in this field has been on the spin of the proton and its relation to the angular momenta of the quark and gluon constituents. In inelastic scattering of leptons off polarized nucleons it was found that surprisingly little of the proton spin is carried by the quark and anti-quark spins. This has triggered much theoretical progress, and led to new experiments dedicated to unraveling the proton spin structure, in both lepton-nucleon and proton-proton scattering. The talk gives a synopsis of the historical development of the field and describes some of the recent results in theory and experiment.

Freitag, 01.07.2011, 17 Uhr c.t.,

**KIT, Campus Süd,
Otto-Lehmann-Hörsaal, Physik-Flachbau (Geb. 30.22).
Anschließend Nachsitzung im Gastdozentenhaus „Heinrich Hertz“**