Training school for graduating students, PhD students and young researchers. Are spin-statistics connection and quantum theory exact? The endeavor for the theory beyond the standard quantum mechanics. FQT2016

Contribution ID: 26

Type: not specified

Lecture 7: Experimental test of spin-statistics and the CPT symmetry

Tuesday, 20 December 2016 12:30 (1 hour)

The spin-statistics theorem is a pillar of quantum theory and together with CPT symmetry it is fundamental for the relativistic quantum field theory. Up-to now no violations of spin statistics and CPT were found. Nevertheless, experimental attempts were and are performed to proof or falsify these concepts with experiments at extremely high sensitivity. This lecture will discuss the spin statistics theorem (which is connected to the Pauli Exclusion Principle) and the CPT symmetry in connection to recent experiments

Presenter: Dr MARTON, Johann (Stefan Meyer Institute)