

## Area Seminar

Title Quark and Gluon Angular Momenta Contributions to Nucleon Spin (?QCD Collaboration)

Date and Time 07/03/2013 16:00:00

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Area Theoretical Physics

Venue Room No. 469

Abstract The nucleon spin structure has been a longstanding issue in hadronic physics, both experimentally and theoretically. From the polarized Deep Inelastic Scattering experiments and Lattice QCD calculations, it has been found that the contribution coming from the quark spin is rather small (~25%). Now, it is widely accepted that the rest of the nucleon spin should come from the gluon spin and the orbital angular momenta of quarks and gluons. In this talk, I will present a complete Lattice QCD calculation of the quark and gluon angular momenta inside a proton. The calculation is carried out on a  $16^3 \times 24$  quenched lattice using the standard Wilson action.