

# XVth Quark Confinement and the Hadron Spectrum



Contribution ID: 118

Type: Oral

## Gluons from the Dressing of Quarks: Parton Momentum Fraction, Spin, and Mass Distribution

*Thursday 22 August 2024 16:00 (30 minutes)*

The parton structure of the nucleon and pion is investigated in a model that allows one to see if the dressing of quarks can, by itself, produce realistic gluon contributions to momentum fractions, spin, mass distributions and mass radii. The model is the Dyson-Schwinger Equations in Rainbow-Ladder truncation and involves calculation of the second Mellin moment of certain GPDs. For the Mass-Energy distributions as a function of momentum transfer, we directly calculate the matrix element of the Energy-Momentum Tensor formulated as an energy fraction expectation value similar to the parton momentum fraction.

**Primary author:** TANDY, Peter (Kent State University)

**Presenter:** TANDY, Peter (Kent State University)

**Session Classification:** Light Quarks

**Track Classification:** B: Light Quarks