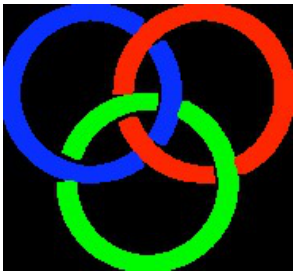

ID de Contribution: **6** Type: **Non spécifié**

Unquenching the quark model

mercredi 12 octobre 2011 09:40 (40 minutes)

The formalism for a new generation of Constituent Quark Models, in which the higher Fock components of the baryon wave functions are explicitly and systematically introduced through a QCD inspired 3P0 pair-creation mechanism, has been recently constructed [1]. This unquenching of the Quark Model will be presented discussed. It will be shown how after renormalization, the unquenching [1] is able to preserves the phenomenological successes of the old constituent quark model, but opening the possibility to address open problems in hadron structure and spectroscopy. Interesting results for the spin of the proton [1] and the flavor asymmetry of the nucleon sea [2] will be presented. New results on open problems in hadron spectroscopy and structure will be presented.
References
[1] R. Bijker and E. Santopinto, Phys. Rev. C80, 065210 (2009).
[2] E. Santopinto and R. Bijker, Phys. Rev. C82, 062202R (2010).

Author: Dr SANTOPINTO, Elena (INFN)

Co-auteur: Dr BIJKER, Roelof (UNAM)

Orateur: Dr SANTOPINTO, Elena (INFN)