Light Cone 2021: Physics of Hadrons on the Light Front



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Nucleon electromagnetic properties in a light front quark model

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The nucleon electromagnetic properties are studied in a constituent light front quark model by using a scalar spin coupling between quarks fields and nucleon fields. We have studied a comparison between one scale wave function and two scale wave function. The introduction of a high momentum scale in the wave function moves the value of the square momentum transfer, in which the zero of electric form factor is zero, improving, in the such way, the fit of $\mu_p G_{Ep}/G_{Mp}$ and also preserving static properties of the nucleon obtained in our previous works, where the wave function used was composed by only one scale.

Authors: SUISSO, Edson (Instituto Nacional da Propriedade Industrial); ARAUJO, Wilson (Secretaria da Educação do Estado de São Paulo); DE MELO, João Pacheco (LFTC - Universidade Cruzeiro do Sul / UNICID); TSUSHIMA, Kazuo (LFTC - Universidade Cruzeiro / UNICID, Brazil); FREDERICO, Tobias (Instituto Tecnologico de Aeronautica)

Presenter: ARAUJO, Wilson (Secretaria da Educação do Estado de São Paulo)

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