N(1520) electromagnetic transition form factors

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The electromagnetic transition form factors of the nucleon provide important information on the internal structure of hadrons. A model-independent dispersive calculation of the Electromagnetic form factors $N*(1520) \rightarrow N$ at low energies will be presented. Taking pion rescattering into consideration, we derived dispersive relations for the $N*(1520) \rightarrow N$ TFFs that relate space-like and time-like regions from the first principles. Based on the space-like data from JLab, we make predictions for TFFs in the time-like region and our predictions can be tested in future experiments (e.g.HADES).

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