

Time-like Baryon Form Factors

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Inspired by the recent precise data, we perform model-independently an isospin decomposition of the timelike octet baryons electromagnetic form factors. As noted in our previous work, the relative magnitude of isoscalar and isovector component is determined with the input of data on various isospin channels. Herein we further assert that their relative phase can be constraint by the phase difference of oscillatory modulation of effective form factors between isospin channels. The framework is extended to analyze the data of differential cross sections and applied to the form factors of nucleon and hyperons with detail and isospin non-conservation of charmonium decay into baryon-anti-baryon as well. We address that isospin analysis is meaningful when the isospin broken scale is compared to or smaller than the uncertainties of data

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