

ELECTROWEAK POLARISABILITIES USING FEYNMAN-HELLMANN ON THE LATTICE

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Radiative corrections to precision tests of the Standard Model often require calculation of box diagrams including $\square_{\gamma Z}$. The current determination of this diagram for low energy regimes is model dependent. We look at a second order extension of the Feynman-Hellmann theorem to extract even time polarisabilities using lattice QCD. As an illustration of the method, we compare our results to the Adler form factor $C_5^A(Q^2 \approx 0)$ for the p to Δ^+ transition.