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Deuteron electromagnetic form factors in AdS/QCD

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We present a high-quality description of the deuteron electromagnetic
form factors in a soft-wall AdS/QCD approach [1]. We propose an effective action describing the dynamics of the deuteron in the presence of an external vector field. Based on this action the deuteron
electromagnetic form factors are calculated, displaying the correct (1/Q2)**5 power scaling for large Q2 values. This finding is
consistent with quark counting rules and the earlier observation that
this result holds in confining gauge/gravity duals. The Q2 dependence
of the deuteron form factors is defined by a single and universal scale parameter kappa, which is fixed from data.

[1] T. Gutsche, V. E. Lyubovitskij, I. Schmidt and A. Vega,
"Nuclear physics in soft-wall AdS/QCD: Deuteron electromagnetic form factors," Phys. Rev. D 91, 114001 (2015)
[arXiv:1501.02738 [hep-ph]].

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