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## The static force with gradient flow

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We measure the static force directly by inserting chromo electric fields into the Wilson loop. We use the gradient flow to improve the signal-to-noise ratio, and to renormalize the field components. Furthermore, we can perform the continuum and zero flow time limit, obtaining a first direct determination of the QCD static force.

By comparing the lattice result with a perturbative calculation of the force, we can aim at a precise extraction of  $\Lambda_0$ . Additionally, we obtain a determination of the scales  $r_1$ , and  $r_0$ .

### Topical area

Standard Model Parameters

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