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# The twisted gradient flow running coupling in SU(3): a non-perturbative determination

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We report some preliminary results of our ongoing non-perturbative computation of the twisted 't Hooft running coupling in a particular set-up, using the gradient flow to define the coupling and step scaling techniques to compute it. For the computation we considered a pure gauge SU(3) theory in four dimensions, defined on the lattice on an asymmetrical torus endowed with twisted boundary conditions in a single plane, and related the energy scale of the coupling to an effective size combining the size of the torus and the rank of the gauge group. Additionally, we explore some of the effects of the freezing of the topology on the computation of the coupling.

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