

Simulating at Realistic Quark Masses: The Running Coupling Constant and Strange Quark Mass

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Abstract: We present an update on our previous determination of the strange quark mass and lambda parameter in QCD. The calculations are performed for two flavour $O(a)$ improved Wilson fermions. The main emphasis of the talk is on new results for light quarks, where we have now reached pseudoscalar masses down to 300MeV. As well as considering chiral extrapolations down to the physical point, we have also attained a lattice spacing of $a \sim 0.07\text{fm}$, thus also allowing the continuum limit to be taken.