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Mass anomalous dimension and running of the coupling in SU(2) with six fundamental fermions

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We simulate SU(2) gauge theory with six massless fundamental Dirac fermions. By using the Schrödinger Functional method we measure the running of the coupling and the fermion mass over a wide range of length scales. We observe very slow running of the coupling and construct an estimator for the fermion mass anomalous dimension at an IR fixed point. Our results are consistent with an IRFP coupling of $2.95 < g^2 < 5.60$ and a corresponding anomalous dimension of $0.07 < \gamma < 0.79$.

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talk

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