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Master-field simulations of QCD

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We report on the first master-field simulations of QCD with 2+1 dynamical quark flavours using non-perturbatively improved stabilised Wilson fermions. Our simulations are performed at a lattice spacing of 0.095 fm with 96 and 192 points in each direction. With $Lm_\pi=12.5$ and 25, both lattices feature a pion and kaon mass of about 270 and 450 MeV. This setup is compatible with a chiral trajectory at fixed trace of the quark mass matrix and allows for comparisons to standard large-scale simulations. In this talk, we present our algorithmic setup and performance measures, and report about our experience in thermalising large master-field lattices with fermions.

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