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Status of the ETMC ensemble generation effort

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We report the status of the ensemble generation effort of the Extended Twisted Mass Collaboration towards controlled continuum and infinite volume extrapolations for a variety of physical observables through simulations employing $N_f = 2 + 1 + 1$ Wilson clover twisted mass fermions at physical quark masses using five lattice spacings. We further give an update on the status of the tmLQCD software suite. Through extensions of the QUDA lattice QCD library and a corresponding interface in tmLQCD, we are able to offload a significant portion of our HMC to GPUs, enabling efficient simulations on the current generation of heterogeneous machines.

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