Reducing the beta-shift in domain wall fermion simulations.

Presenter: Alban Allkoci

Alban Allkoci, Artan Borici

Abstract: The beta-shift induced from dynamical domain wall quarks leads to increased roughness of the gauge field, thus reversing the effect of smoothing from the gauge action improvement. By exploiting the relation of overlap and domain wall fermions in greater detail, we propose an algorithm which reduces the beta-shift to the level of the dynamical overlap fermions.