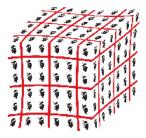Contribution ID: **185**　　　　　　　　　　　　　　　　　　　　Type: **not specified**

Computing the B*Bpi coupling with relativistic heavy quarks and domain wall fermions

Tuesday, 15 June 2010 09:30 (20 minutes)

The effective coupling constant $g_{VP\pi}$, describing the coupling of heavy mesons to the pseudoscalar Goldstone bosons (pions), is one of the fundamental parameters of the effective chiral lagrangian for heavy mesons. This coupling encodes non-perturbative QCD effects describing the decay of heavy vector particles into pseudoscalars, $V \to P\pi$.

Beside its direct physical relevance in the D system it is also of phenomenological importance to estimate this coupling non-perturbatively in the B system. I report on the (first) ongoing computation of $g_{VP\pi}$ using the non-perturbatively tuned relativistic heavy quark action (RHQ) to treat the c- and b-quark. We use domain wall light fermions and work on dynamical 2+1 DWF configurations as produced by the RBC/UKQCD collaboration.

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talk

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