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## Pion couplings to the scalar B meson

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Computing the quark propagator on the lattice gets more and more difficult as the light quark becomes small and approach its physical value. Therefore, most simulations are performed at unphysical light quark masses and the results are extrapolated to the physical mass using fit formulae inspired by chiral perturbation theory. In the case of heavy-light mesons, one can use the Heavy Meson Chiral Perturbation Theory parametrized, at leading order, by three couplings  $g$ ,  $\tilde{g}$  and  $h$ .

In this talk, I will present a lattice computation of the couplings  $\tilde{g}$  and  $h$  which appear when positive parity states are taken into account. In particular, I will show that the coupling  $h$  is large and cannot be neglected in chiral loops.

The lattice simulations are performed on a set of  $N_f = 2$  dynamical quarks configurations made available by the Lattice Coordinated Simulations effort.

### Summary

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