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g_B*Bpi coupling in the static heavy quark limit

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It is common to use the Heavy Meson Chiral Perturbation Theory to modelise the transitions involving heavy mesons and soft pions. The corresponding effective Lagrangian has few couplings: one of them is g_BBpi parameterising the transition between B, B and a soft pion. As the process $B^* \to B$ pi is forbidden kinematically, the coupling is not accessible to experiment and has to be determined non perturbatively. In this talk I will present a recent extraction of that coupling in the static heavy quark limit by means of lattice simulations of QCD in which the effect of Nf=2 dynamical quarks have been taken into account and whose the lattice spacings are sufficiently small to allow a reasonable control on cut-off effects.

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