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Lattice QCD results for mesons containing b-quarks from the HPQCD Collaboration

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I report on progress by the HPQCD Collaboration using radiatively-improved lattice NonRelativistic QCD on ensembles of gluon field configurations that now include u, d, s and c quarks in the sea with the u/d quark mass going down to its physical value. I describe the background field approach for determining the one-loop radiative improvement to coefficients in the NRQCD action, and I present the most accurate results yet for a range of quantities, including f_B/f_B_s,m_B_s/m_B, the B_Bbar mixing calculation, the determination of m_b and the Upsilon-eta_b hyperfine splitting.

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