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## **B meson decay constants and Delta B=2 matrix elements with static heavy and domain-wall light quarks**

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Neutral B meson mixing matrix elements and B meson decay constants are calculated. Static approximation is used for b quark and domain-wall fermion is employed for light quarks. The calculations are carried out on  $N_f=2+1$  dynamical ensembles with lattice spacings of 0.086fm and 0.11fm, and a fixed physical spatial volume of about  $(2.7\text{fm})^3$ , generated by RBC/UKQCD Collaborations. We employ two kinds of link-smearing and their results are combined in taking a continuum limit. For the matching between the lattice and the continuum theory, one-loop perturbative  $O(a)$  improvements are made to reduce discretization errors. We also show statistical improvements by the all-mode-averaging technique.

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