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Semileptonic $B_s \to K$ and $B_s \to D_s$ decays

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We present our results for the semileptonic formfactors of exclusive $B_s \to K\ell\nu$ and $B_s \to D_s\ell\nu$ decays. The calculation is based on RBC/UKQCD's set of 2+1 dynamical flavour gauge field ensembles spanning three lattice spacings. We use domain wall fermions for the valence up/down, strange and charm quarks whilst the bottom quark is simulated using the relativistic heavy quark action. After presenting the extrapolation to zero lattice spacing and physical quark masses we show our complete error budget and kinematic extrapolations over the entire q^2 range.
Using our results we predict ratios which serve as tests of lepton flavour universality. These form factors can be combined with experimental data (where available) to extract the CKM matrix elements V_{ub} and V_{cb}, complimentary to extractions from $B \to \pi\ell\nu$ and $B \to D\ell\nu$.

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