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# Form factors for semi-leptonic $B_{(s)} \rightarrow D_{(s)}^* \ell \nu_\ell$ decays

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Semileptonic  $B_{(s)}$  decays are of great phenomenological interest because they allow to extract CKM matrix elements or test lepton flavor universality. Taking advantage of existing data, we explore extracting form factors for vector final states using the narrow width approximation. Based on RBC-UKQCD's set of 2+1 flavor gauge field ensembles with Shamir domain-wall fermion and Iwasaki gauge field action, we study semileptonic  $B_{(s)}$  decays using unitary light and strange quarks, Möbius domain wall fermions for charm quarks, and bottom quarks simulated with the relativistic heavy quark (RHQ) action. Exploratory results for  $B_s \rightarrow D_s^* \ell \nu_\ell$  are presented.

**Primary author:** BOUSHMELEV, Anastasia (University of Siegen)

**Co-authors:** BLACK, Matthew (University Siegen); WITZEL, Oliver (Universität Siegen)

**Presenter:** BOUSHMELEV, Anastasia (University of Siegen)

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