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Semileptonic B decays into final states with heavy sterile neutrinos

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$B \rightarrow D^* \ell \nu$ decays are sensitive to contributions in which the missing energy and momentum stem from a hypothetical heavy sterile neutrino N . Belle II data on angular distributions in this decay are used to search for hints $B \rightarrow D^* \ell N$ in a model-independent way. To this end dimension-6 operators with different Dirac structures are considered and competitive upper bounds on some of their couplings are derived. I will show the allowed regions in the coupling-versus-mass plane and discuss the implications.

Primary authors: BERNLOCHNER, Florian; FEDELE, Marco; PRIM, Markus; KRETZ, Tim; NIERSTE, Ulrich (KIT)

Presenter: NIERSTE, Ulrich (KIT)

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