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## Semileptonic and leptonic B and $B_s$ decays at Belle

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Semileptonic B meson decays,  $B \rightarrow X\ell\nu$ , are currently the preferred modes for determining the Cabibbo-Kobayashi-Maskawa (CKM) matrix elements  $|V_{cb}|$  and  $|V_{ub}|$ , two fundamental parameters of the Standard Model. At the same time they can also be used to test and refine the theoretical tools used for describing B mesons and their decays. Purely leptonic B meson decays,  $B \rightarrow \ell\nu$ , are helicity-suppressed in the SM, and while more challenging for the extraction of the CKM matrix elements, they are excellent probes of models beyond the SM. The decay  $B \rightarrow \mu\nu$  is at the edge of the sensitivity of current experiments, while  $B \rightarrow e\nu$  will remain inaccessible to the next generation of experiments in the SM. Based on the large data sample accumulated by the Belle experiment at the KEKB asymmetric energy  $e^+e^-$  collider at KEK, Japan, we present new results on semileptonic and leptonic  $B_{(s)}$  meson decays.

### Summary

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