

Abstract Submitted
for the APR17 Meeting of
The American Physical Society

Search for $B^+ \rightarrow K_S K_S h^+$ decays at Belle¹ VIPIN GAUR, Virginia Tech, BELLE COLLABORATION — We present updated measurements of charmless decays of charged B mesons to the three-body final states of $K_S K_S K^+$ and $K_S K_S \pi^+$, based on a data sample containing 770×10^6 $B\bar{B}$ events. The data were recorded with the Belle detector operating near the $\Upsilon(4S)$ resonance at the KEKB asymmetric-energy e^+e^- collider. The $B^+ \rightarrow K_S K_S K^+$ and $B^+ \rightarrow K_S K_S \pi^+$ decays proceed via the $b \rightarrow s$ and $b \rightarrow d$ flavor-changing neutral current (FCNC) transitions, respectively, providing a good probe for new physics beyond the standard model (SM). We report the results on the branching fractions and direct CP asymmetries for both the decay channels.

¹Supported by the Department of Energy Office of Science

Leo Piilonen
Virginia Tech

Date submitted: 30 Sep 2016

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