Abstract Submitted for the APR21 Meeting of The American Physical Society

Search for New Decays of B_s Mesons to η' at Belle¹ TONG PANG, VLADIMIR SAVINOV, University of Pittsburgh, BELLE COLLABORATION — We search for charmless two-body decays of B_s mesons to η' and report the results obtained using the full $\Upsilon(5S)$ Belle data sample. These decays are sensitive to contributions from BSM amplitudes and, with larger statistics, could be used to search for new sources of CP violation. We discuss the analysis optimization strategy, background suppression, using data-based calibration methods and report the final results. We elaborate on enigmatic role of the η' in B decays and beyond.

¹DOE award number DE-SC0007914

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Date submitted: 31 Dec 2020 Electronic form version 1.4