

Abstract Submitted
for the APR17 Meeting of
The American Physical Society

Recent Results of Bottomonium Spectroscopy in Radiative $\Upsilon(2S)$ Decays at Belle ZACHARY STOTTLER, Virginia Polytechnic Institute and State University, BELLE COLLABORATION — We report on the recent results of a search for $\Upsilon(2S) \rightarrow (b\bar{b})\gamma$ decays. We characterize the properties of $\chi_{bJ}(1P)$ ($J = 0, 1, 2$) mesons, which are reconstructed from 74 hadronic final states containing charged and neutral pions, kaons, protons. In total, we observe 41 modes with a significance at or above 5σ , many of which are first observations. Our results are based on an integrated luminosity of $24.7 fb^{-1}$ of e^+e^- collision data recorded by the Belle detector at the $\Upsilon(2S)$ resonance, corresponding to $(157.8 \pm 3.6) \times 10^6$ $\Upsilon(2S)$ events.

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Date submitted: 30 Sep 2016

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