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Spectroscopy results from BaBar

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This talk intends to shortly summarize the recent results on Spectroscopy, published from the $BaBar$ Collaboration. The $BaBar$ experiment is a B-factory, at SLAC, where asymmetric energy beams of electron-positron are accelerated and collide at the energy in the center of mass of Υ(4S). In 9 years of data taking, $BaBar$ had collected 433 fb^{-1} equivalent luminosity on-peak-data at the Υ(4S) energy, 30 fb^{-1} data at the Υ(3S) energy, 15 fb^{-1} data at the Υ(2S) energy, and a scan around Υ(4S) was done, collecting 25 pb^{-1} every 5 MeV. Thanks to the high luminosity achieved, it is possible to perform high precision measurements, and spectroscopy studies. An update on the measurement of the state X(3872) will be given, as final result published by using the whole dataset available. Then, a new preliminary Y(4260) measurement is reported, and the study of the invariant mass $J/\psi\pi^+\pi^-$ in ISR events is shown, where no evidence of the state Y(4050) is highlighted. As conclusion, the results on the angular distribution analysis performed on the state Z(4430) are reported.

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