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Exotic J/ψ Φ Structures and Search for the $Z(4430)^+$ State at CDF

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- Updated studies of exotic J/ψ Φ structures at CDF
We report updated studies of the J/ψ Φ mass spectrum in exclusive $B^+ \rightarrow J/\psi \Phi K^+$ decays collected by the CDF experiment. Using an increased data sample of 5 fb^{-1} and by adding new triggers we establish observation of the $Y(4140)$ state in its $J/\psi \Phi$ decay and provide more precise measurements of its properties.
- Search for multiquark $Z(4430)^+$ state in hadron collisions
The observation of the $Z(4430)^+$ resonance, the first solid candidate exotic multiquark state, has been reported by the Belle experiment but not confirmed by Babar. Any information from the Tevatron could be discriminating in establishing or excluding its existence. We report the first search for exotic $Z(4430)^+$ state in hadron collisions, using 5.7 fb^{-1} of data collected by the CDF detector at the Tevatron collider.

Primary author: THE CDF COLLABORATION**Presenter:** YI, Kai (Physics and Astronomy Department-University of Iowa)**Session Classification:** 04 - Hadronic Structure, Parton Distributions, soft QCD, Spectroscopy**Track Classification:** 04 - Hadronic Structure, Parton Distributions, soft QCD, Spectroscopy