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Recent results on light hadron spectroscopy at BES

With 58M J/ψ events at BESII, an anomalous enhancement, $X(1860)$, near the mass threshold in the $p\bar{p}$ invariant mass spectrum from $J/\psi \to \gamma p\bar{p}$ decays was reported. And a resonance named $X(1835$ is also observed in $\eta'\pi^+\pi^-$ invariant mass spectrum from $J/\psi \to \gamma\eta'\pi^+\pi^-$. Whether $X(1860)$ and $X(1835)$ are the same resonance or not needs further confirmation.

With 100M $\psi(2S)$ events collected at BESIII, the $p\bar{p}$ threshold enhancement $X(1860)$ is confirmed in the decays of
$\psi(2S) \to \pi^+\pi^- J/\psi, J/\psi \to \gamma p\bar{p}$. The
mass and width of $X(1860)$ are consistent with those from BESII
data. It is also confirmed in $J/\psi \to \gamma p\bar{p}$ with 200M
J/ψ data sample.
The decays of $J/\psi \to \gamma\eta'\pi^+\pi^-$ are examined too.
The resonance $X(1835)$
is confirmed with a much higher statistical significance. We also study
the isospin breaking process $J/\psi \to \phi f_0(980)$ for the
study of $a_0(980)$ and $f_0(980)$ mixing. The preliminary results are presented.

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