



Contribution ID: 527

Type: **Talk**

ATLAS results on J/ψ p resonances in the Λ_b $\rightarrow J/\psi$ p K decays

Wednesday 8 September 2021 17:40 (20 minutes)

A study of J/ψ p resonances in the $\Lambda_b \rightarrow J/\psi$ p K decays with large $m(pK)$ invariant masses is presented by the ATLAS experiment at the LHC. The analysis is based on a combined sample of pp collision data at centre-of-mass energies of 7 TeV and 8 TeV corresponding to integrated luminosities of 4.9 fb⁻¹ and 20.6 fb⁻¹, respectively. Although the data prefer the model with two or more pentaquark states, the model without pentaquarks is not excluded. The pentaquark masses and widths obtained using the model with two pentaquarks are consistent with those from the LHCb experiment.

Primary author: YELETSKIKH, Ivan

Presenter: YELETSKIKH, Ivan

Session Classification: Hadron spectroscopy and exotics

Track Classification: Hadron spectroscopy and exotics