Contribution ID: **432** Type: **Poster**

Spectroscopic analysis of Heavy Pentaquarks

Thursday 15 December 2022 14:00 (1 hour)

We have studied the mass spectra and decay rates of fully heavy pentaquarks systems $QQQQ\bar{Q}$ (where $Q = c, b$) by using a non-relativistic potential model. In this model, a complex five-body problem is reduced to a simpler two -body problem. The Schrodinger wave equation has been solved numerically with Cornell-type potential. The non-relativistic potential includes Spin-Spin, Spin-Orbit interactions and tensor components of one gluon exchange interaction. We have computed heavy Quarkonia's spectra and decay rates. The spectroscopy of low-lying $S-$ and $P-$ waves are also analysed for their J^{PC} values .The computed masses and decay rates to these states matches with the available theoretical and experimental data.

Session

Quark and Lepton Flavour Physics

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Session Classification: Poster - 3