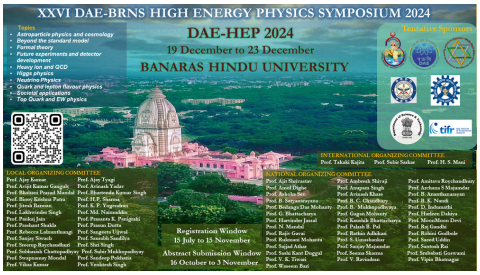

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Spectroscopy of hidden-bottom Pentaquarks.

Considering the discoveries of pentaquark structures such as P_{\psi s}^\Lambda(4338)^0, P_c(4380), and P_c(4450), we conducted a spectroscopic analysis of hidden-bottom pentaquarks. Using special unitary group representations, we systematically classified these hidden-bottom pentaquarks into two distinct configurations within the SU(3) flavor representation: the octet and the decuplet. In this study, we utilized an extended form of the Gursey-Radicati (GR) mass formula and the effective mass scheme to estimate the masses of hidden-bottom pentaquarks. Additionally, our analysis extends to estimating the magnetic moments, employing the effective mass and screened charge schemes. Our findings, encompassing calculations of masses and magnetic moments, show a reasonable alignment with current theoretical predictions.

Field of contribution

Theory

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Track Classification: Beyond the standard model