

# The $J/\psi$ meson and the missing heavy baryon octet

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The 5D homogeneous space-time projection theory produces the Gell-Mann standard model, and the gluon fields together with quantum gauge constraint which is responsible for the major portion of the hadron mass as discussed previously. It was found that the SU(3) representations for the mesons and baryons together with the mass levels within each representations are generated by the gluon fields strength factors which form their respective Lorentz jet sum rules. In this paper, we deduce from the meson jet sum rule the remaining mesons, the  $J/\psi$  particle with the exact mass of 3096 MeV, and the Y particles with mass 9460 MeV and 4140 MeV. For the baryons, there might be the not yet found octet with mass levels in the 5 to 8 GeV energy region, with mass level splitting also in the GeV range, far higher than those in the known octet and decuplet

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