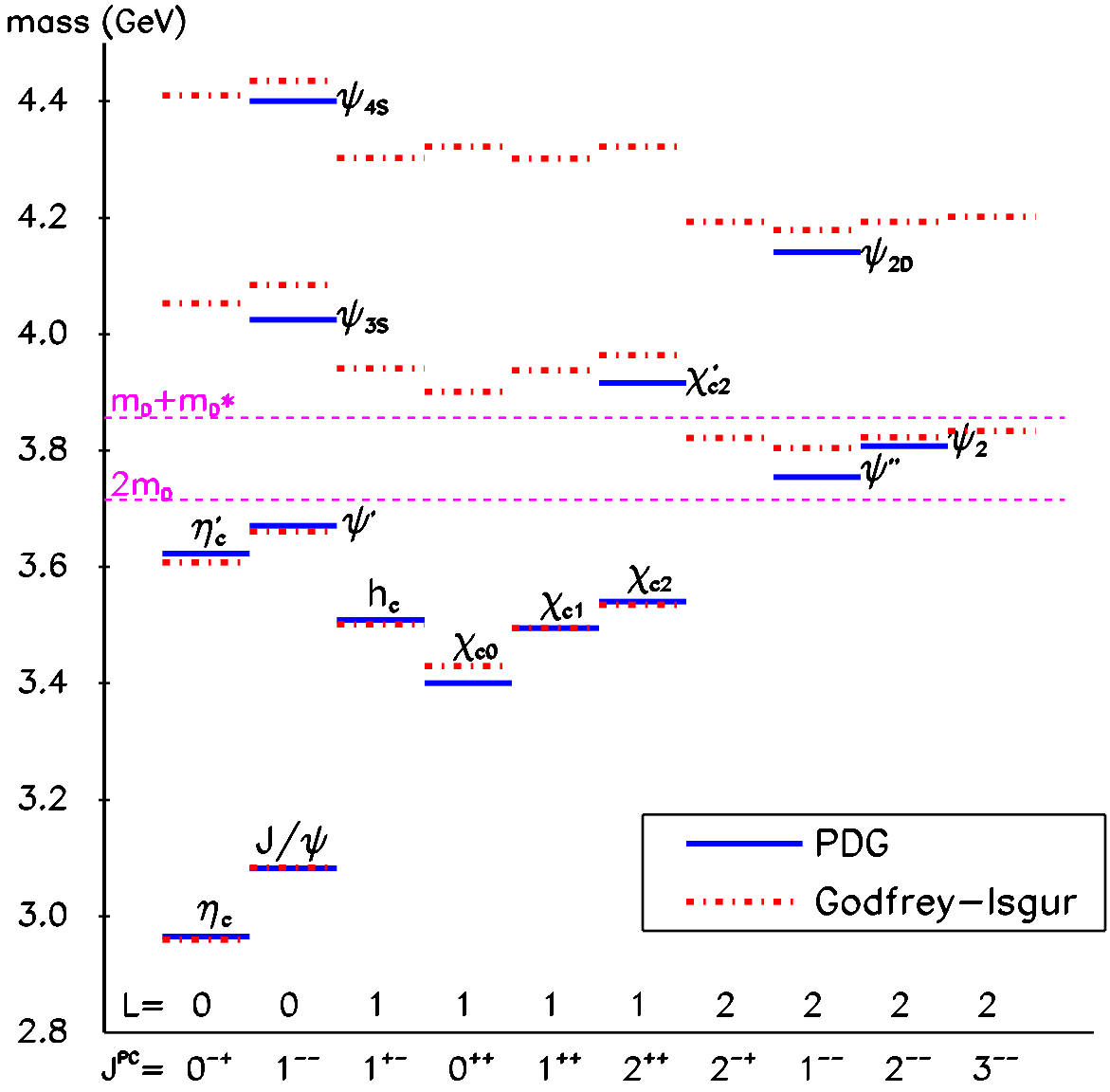
mass (GeV)
4.4
4.2
4.0
3.8
3.6
3.4
3.2
3.0
2.8
ψ_{4S}
ψ_{3S}
ψ_{2D}
χ'_{c2}
$m_D+m_{D^*}$
ψ_2
ψ''
$2m_D$
η'_c
ψ'
h_c
χ_{c2}
χ_{c1}
χ_{c0}
J/ψ
η_c
PDG
Godfrey–Isgur
L= 0 0 1 1 1 1 2 2 2 2
J^{PC}= 0^{-+} 1^{--} 1^{+-} 0^{++} 1^{++} 2^{++} 2^{-+} 1^{--} 2^{--} 3^{--}