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Diquark Sum Rules for Exotic Baryons

We want to calculate the masses of Lambda (1405) and N(1535) through the diquark sum rules with the interpolating field proposed by the diquark cluster picture for the penta-quark components in baryons. According to the paper, International Journal of Modern Physics A Vol. 21, No. 27 (2006), B. S. Zou, the penta-quark components could be dominant for some excited baryons and the diquark cluster picture for the penta-quark components in baryons also gives a natural explanation for the longstanding mass-reverse problem of N(1535), N(1440) and Lambda (1405) resonances as well as the unusual decay pattern of the N(1535) resonance.

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