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Relativistic description of triply heavy tetraquarks

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Masses of the triply heavy tetraquarks of all flavor contents are calculated within the relativistic quark model, based on the quasipotential approach and QCD, and diquark–antidiquark picture of tetraquarks. The relativistic quasipotential equation takes into account all spin-dependent and spin-independent relativistic corrections and the internal structure of the diquarks. The calculated masses of such tetraquarks are compared with the strong fall–apart decay thresholds into a heavy and heavy–light mesons. The states that could be observed as narrow resonances in other decay modes are determined.

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