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New Hadronic States at BESIII JAKE BENNETT, Carnegie Mellon University

Recent discoveries of charged charmonium-like states have generated a great deal of interest in the particle physics community. The simplest interpretation of the quark model of charmonium, in which states consist of bound charm-anticharm quark pairs, is remarkably successful in describing the experimental results for states below $D\bar{D}$ threshold. Within the last decade, however, many new and unexpected states, collectively called XYZ states, have been discovered in the higher mass charmonium spectrum. Several of these states do not appear to be consistent with the simple quark-antiquark interpretation of charmonium. In addition to its world leading samples of J/ψ and ψ' decays, the BESIII collaboration has collected a significant amount of data for the study of XYZ states. In this talk, I will review some of the recent experimental results in hadron spectrocopy from the BESIII collaboration, with a particular emphasis on XYZ studies.