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Radiative Transitions of the Y(4260) at BES III MANUEL LARA,

Indiana University — The recent discoveries of the so called "XYZ" states are beginning to open new possibilities for how quarks can interact and bind. Detailed studies of their decays are underway in many facilities like the BES detector which has collected a over 4 fb⁻¹ of data at energies between 4.01 to 4.6 GeV to study decays of Y(4260). While the nature of the Y(4260) is still unknown two particularly important decay channels to study would be radiative decays to η_c and χ_{c0} , because their branching fraction ratio could be compared to existing E1/M1 branching fractions of conventional charmonium and to lattice qcd predictions. The prospects for measuring such transitions using data collected with the BES detector will be presented.

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