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Probing charmonium production through jet substructure at ATLAS DAVID BJERGAARD, AYANA ARCE[1], Duke University, ATLAS COLLABORATION — There are many open questions regarding charmonium production at hadron colliders. The color octet production mechanism of non-relativistic QCD (NRQCD) was introduced in order to describe the p_T spectrum of prompt J/ψ particles. This mechanism is expected to be characterized by enhanced hadronic activity around the J/ψ. Recently it has been suggested that jet substructure techniques may be able to discriminate between the octet and singlet production mechanisms. An ATLAS measurement of N-subjettiness and the J/ψ-jet momentum fraction in 8 TeV LHC proton-proton collisions will be described.

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