Measurement of Z boson + heavy flavor jet production in pp collisions at $\sqrt{s} = 8$ TeV ANDREW GODSHALK, State University of New York at Buffalo, CMS COLLABORATION — We present results on the heavy flavor jet production in association with the Z boson using proton-proton collision data collected with the CMS detector at a center of mass energy $\sqrt{s} = 8$ TeV. We discuss, in particular, the measurement of the ratio of cross-sections, $\sigma(Z+c\text{-jet})/\sigma(Z+\text{jets})$ and $\sigma(Z+b\text{-jet})/\sigma(Z+\text{jets})$. Studies of these processes provide tests of perturbative QCD predictions and non-perturbative effects. These processes are also important backgrounds to many precision SM measurements as well as to searches for new physics.

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Date submitted: 06 Jan 2016

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