## Abstract Submitted for the APR05 Meeting of The American Physical Society

Measurement of the Inclusive Bottomonium Spectrum SHAWN HENDERSON, University of Kansas, CLEO COLLABORATION — Using data collected from the CLEO III detector at the Cornell Electron Storage Ring, we measured the inclusive photon spectrum for the  $\Upsilon(1S)$ ,  $\Upsilon(2S)$  and  $\Upsilon(3S)$ . By modeling the neutral radiative decay spectrum from observed charged particle momentum distributions, we obtained preliminary branching fractions for the  $\Upsilon(1S)$ ,  $\Upsilon(2S)$  and  $\Upsilon(3S)$  radiative decays. This is the first measurement of the  $\Upsilon(2S)$  and  $\Upsilon(3S)$  radiative branching ratios. Additionally, a refinement of the value of the nuclear strong force coupling constant  $\alpha_s$  is discussed.

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