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Inclusive Semilectronic Decay of the D_s Meson ALEX GILMAN, RONALD POLING, HAJIME MURAMATSU, University of Minnesota, BESIII COLLABORATION — We present an analysis of the inclusive semielectronic decay of the D_s meson using data collected with the BESIII detector at the BEPCII storage ring in Beijing, China. Our data sample consists of an integrated luminosity of $3.19fb^{-1}$ of e^+e^- annihilations collected at $E_{CM} = 4.178GeV$, at which energy D_s production is maximal, with a ~ 1 nb cross section for $e^+e^- \to D_sD_s^*$. We employ a tagged analysis with the use of particle identification and tracking matrix unfolding procedures to obtain our result. An input/output check with a Monte Carlo sample 5 times larger than data demonstrates the validity of our analysis procedure. Our principal results are the worlds most precise measurement of the D_s meson semielectronic branching fraction, improved constraints on the rates for hitherto unobserved exclusive semielectronic modes and the ratio of D_s and D^0 semielectronic widths. Prospects for additional studies of inclusive semileptonic D_s decays with BESIII will also be described.

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