Contribution ID: **1230** Type: **Parallel Session Talk**

Studies of D_s decays at Babar

Saturday 24 July 2010 10:15 (15 minutes)

We present a measurement of the absolute branching fraction Br(Ds->μ ν_μ) and Br(Ds->τ ν_τ) and of the Ds decay constant, f_Ds, using 521 fb-1} of data collected by the BABAR detector at the PEP-II storage rings at SLAC. We also obtained an upper limit on Br(Ds->e ν_e). Ds events are detected by reconstructing the recoiling system, D K X γ, in events of the type e+e−>D K X Ds, *where Ds*->Ds γ and X represents additional pions from fragmentation. We also perform a Dalitz plot analysis of ˜10ˆ5 Ds+->K+ K- π+ decays. Events are selected from continuum e+e- annihilations using 384 fb-1 of data collected with the BaBar detector at PEP-II. A model-independent partial wave analysis is performed in the low K+K- mass region which allows to extract the S and P-wave amplitudes and their relative phase. We also measure relative branching fractions of Ds+->K+ K- K+ and Ds+->K+ K+ π-.

Author: RONEY, Michael (SLAC)

Presenter: PAPPAGALLO, Marco (Universita & INFN, Bari)

Session Classification: 05 - Heavy Quarks Properties (experiment and theory)

Track Classification: 05 - Heavy Quarks Properties (experiment and theory)