Cut efficiencies and optimal cut value Signal purity Signal efficiency Signal efficiency*purity **Background efficiency** S/VS+B (Purity) Efficiency 8.0 20 0.6 15 0.4 10 0.2 For 2169 signal and 7816 background events the maximum S/VS+B is 27.1006 when cutting at -0.0929 0 -0.8-0.6-0.4-0.20.2 0.4 0.6 Cut value applied on BDT_bbar output