Cut efficiencies and optimal cut value Signal purity Signal efficiency Signal efficiency*purity **Background efficiency** S/√S+B Efficiency (Purity) 8.0 20 0.6 0.4 10 For 1000 signal and 1666 background 0.2 events the maximum S/VS+B is 28.2900 when cutting at 0.5022 0.2 0.4 0.6 8.0

Cut value applied on MLPBNN output