Cut efficiencies and optimal cut value Signal purity Signal efficiency Signal efficiency*purity **Background efficiency** S/√S+B 30 Efficiency (Purity) 1 8.0 0.6 15 0.4 0.2 For 1000 signal and 1000 background 5 events the maximum S/√S+B is

0.5

0.6

0.7

0.4

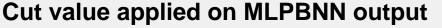
27.72 when cutting at 0.42

0.3

0.2

0

0.1



0.9

8.0