Cut efficiencies and optimal cut value

Legend:
- *Signal efficiency*
- *Background efficiency*
- *Signal purity*
- *Signal efficiency*purity*
- *S/#sqrt{S+B}*

Y-axis (left): Efficiency (Purity)
Y-axis (right): Significance
X-axis: Cut value applied on BDT output

For 33 signal and 20484 background events the maximum S/$\sqrt{S+B}$ is 2.6235 when cutting at 0.1503