Significance for various cases of smearing

$\frac{sig}{\sqrt{bkg}}$

0%
5%
10%
15%
20%

σ
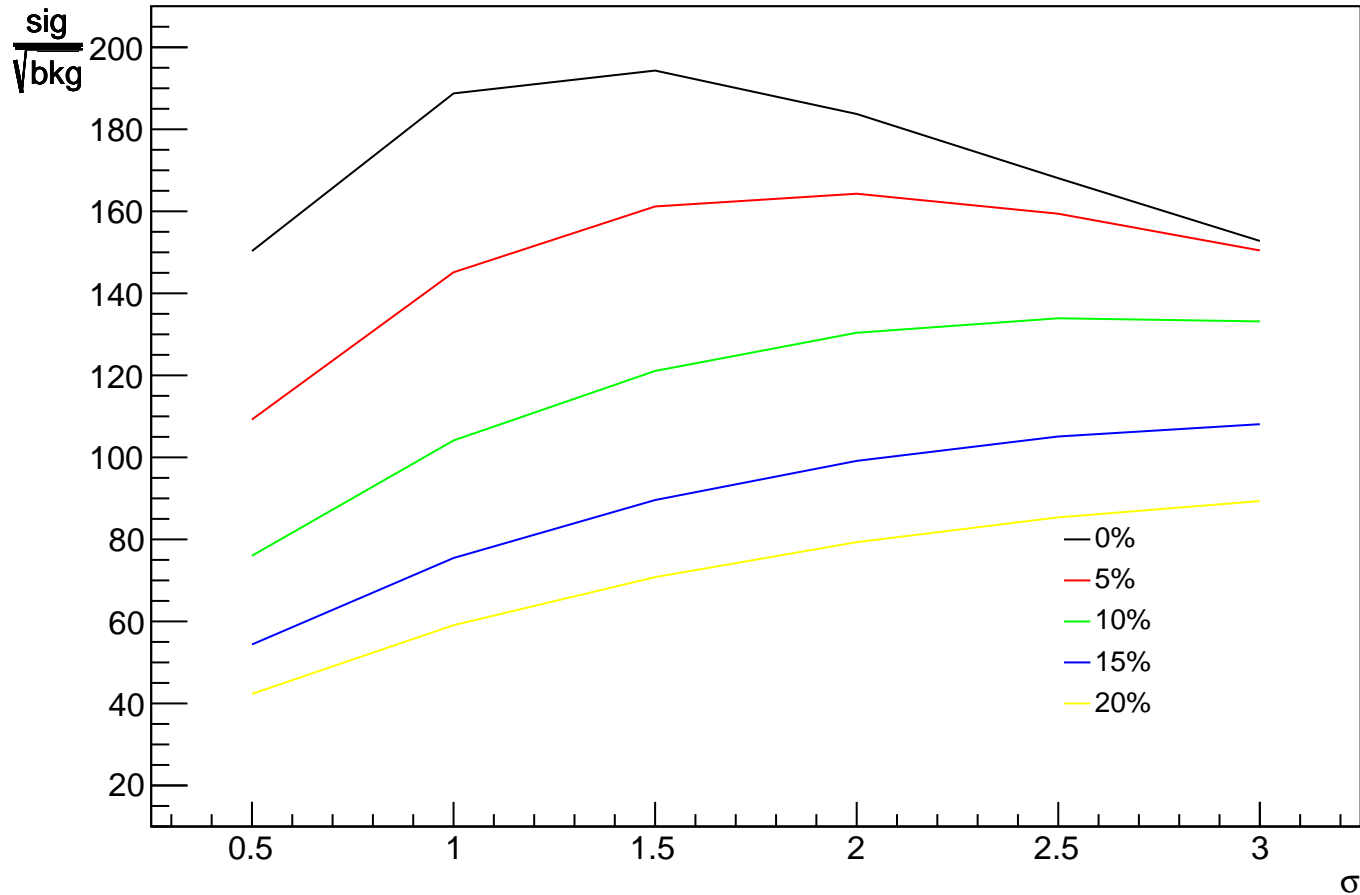
Evolution of significance for cut at 1.5σ

$\frac{\text{sig}}{\sqrt{\text{bkg}}}$

smearing in %