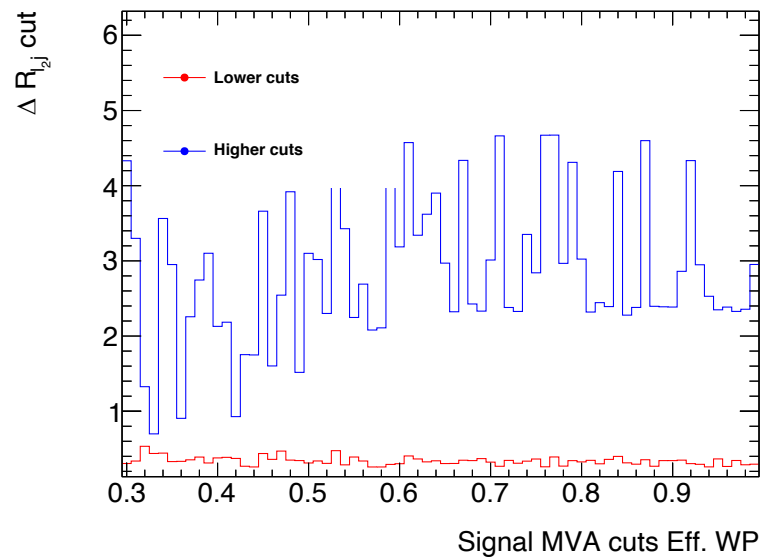
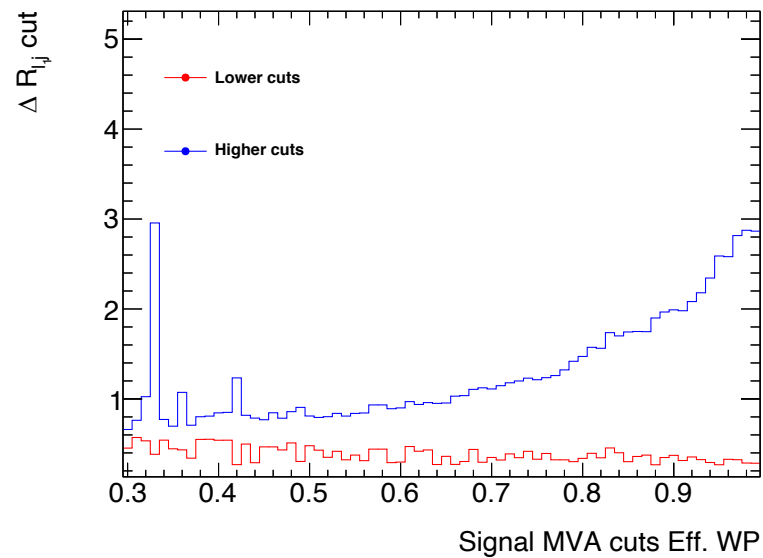
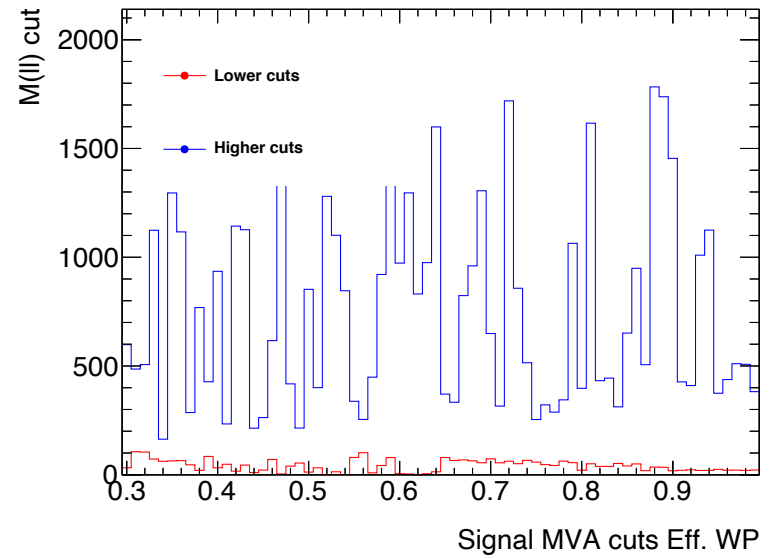
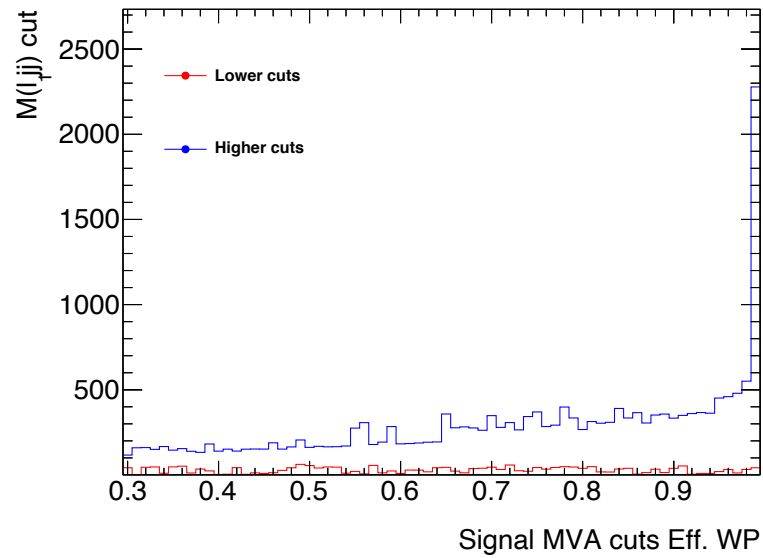


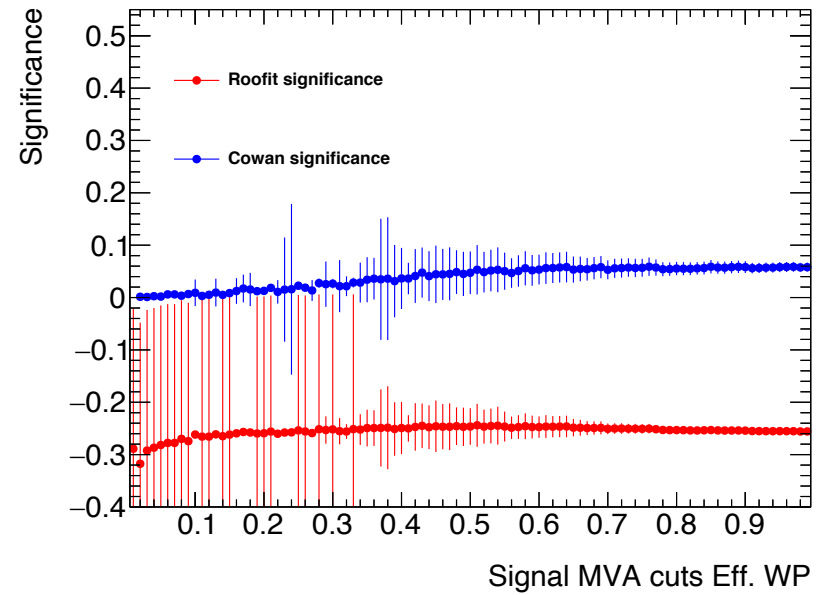
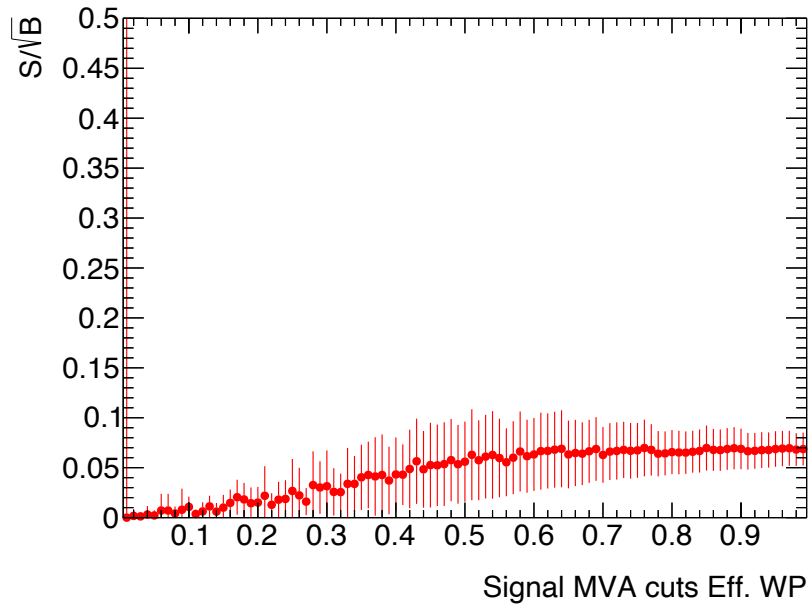
Weekly Report

Xin Shuiting 14/10/2019

CutsSA optimaztion



Choose a working point



RooStats :: NumberCountingUtils :: BinomialExpZ(s, b, e_b)

$$\sqrt{(2((s + b)\log(1 + s/b) - s))},$$

Expected signal number:

$$N = \sigma(pp \rightarrow hh) * br(hh \rightarrow 4W) * \boxed{br(4W \rightarrow 2LSS)} * L = 33fb * 0.046 * 0.13 * 80 = 15.7$$

	bkg	sig	s/sqrt(b)
ee	433.648	1.408	0.067
uu	420.07	2.754	0.13
emu	794.644	4.153	0.147

Got from signal samples

Using preselection njets distribution to get a limit

