

STATUS REPORT ON SEMILEPTONIC WW/WZ DECAY

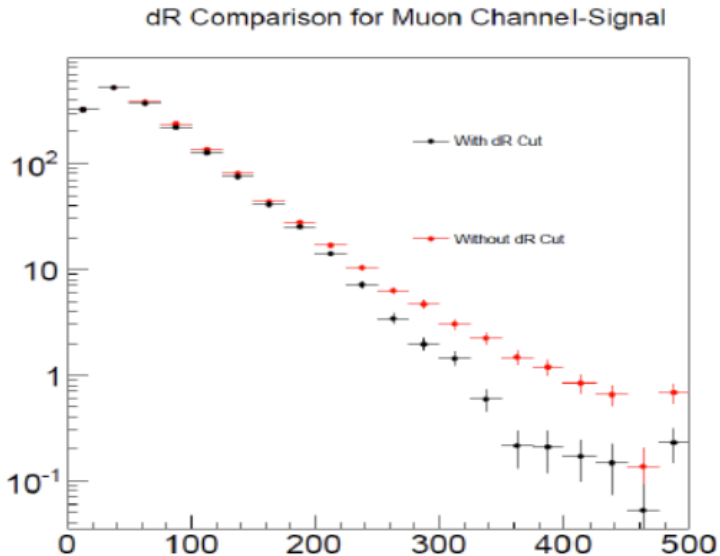
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Meeting session

- 22-26 April: meeting session for semileptonic WW
- discussions on DeltaR cut for p_{Tjj}
- jet veto at $p_T > 25$ GeV
- signal templates
- work on cutflow

DeltaR cut for aTGC



aTGC limits (I)

expected limits:

| limits on λ for 20 bins | | |
|---------------------------------|-------------------|-------------------|
| | muons | electrons |
| 95% CL with ΔR cut | $[-0.118, 0.121]$ | $[-0.127, 0.131]$ |
| 95% CL no ΔR cut | $[-0.057, 0.057]$ | $[-0.052, 0.052]$ |

| limits on $\Delta\kappa_Z$ for 20 bins | | |
|--|-------------------|-------------------|
| | muons | electrons |
| 95% CL with ΔR cut | $[-0.464, 0.520]$ | $[-0.505, 0.568]$ |
| 95% CL no ΔR cut | $[-0.217, 0.244]$ | $[-0.196, 0.222]$ |

- DeltaR cut introduced to avoid MC problem
- aTGC enhance pTjj spectrum at high pT
- but DeltaR cut overkills this region
- limits are doubled with DeltaR cut

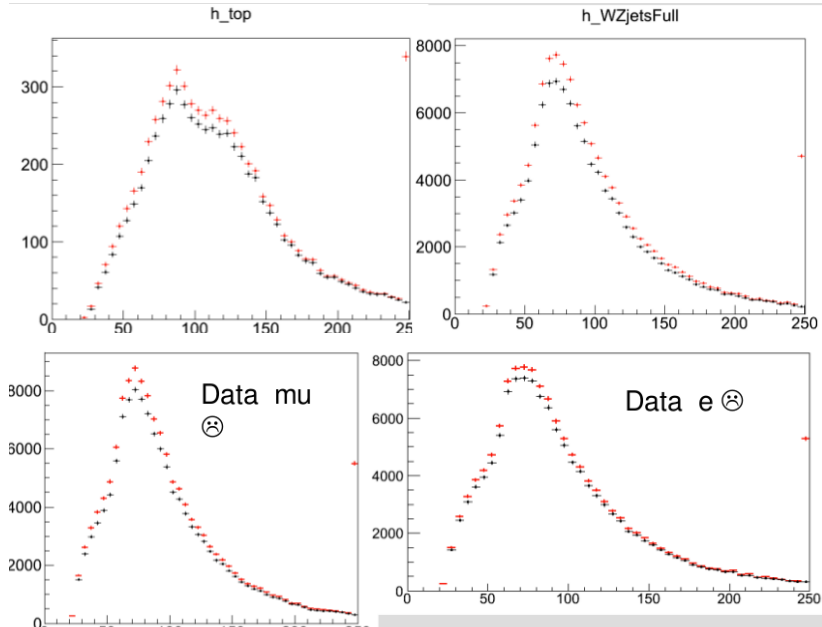
aTGC limits (II)

expected limits applying DeltaR cut for Mjj slices:

| limits on aTGC's, bbb errors only | | |
|-----------------------------------|-------------------|-----------------------|
| | λ | $\Delta\kappa_\gamma$ |
| No ΔR cut | [-0.0411, 0.0413] | [-0.202, 0.226] |
| ΔR for $m_{jj} < 100$ | [-0.0411, 0.0413] | |
| ΔR for $m_{jj} < 150$ | [-0.0411, 0.0413] | |
| ΔR for $m_{jj} < 200$ | [-0.0411, 0.0413] | |
| ΔR for $m_{jj} < 250$ | [-0.0413, 0.0414] | |
| ΔR for $m_{jj} < 300$ | [-0.0416, 0.0417] | [-0.205, 0.228] |

- limits are compatible
- $\Delta\kappa_\lambda$ is almost the same for all the slices

template comparison



Cutflow

- a cutflow procedure has been set up for testing/controlling selection
- samples we look at in details:
 - $W_{\text{enu}}+5$ partons
 - $W_{\text{munu}}+5$ partons
 - one run for egamma stream (data)
 - one run for muon stream (data)
- up to now, decent agreement on first 2 samples
- should add also the qcd selection on data
- all other samples: only final number of events passing the cuts