



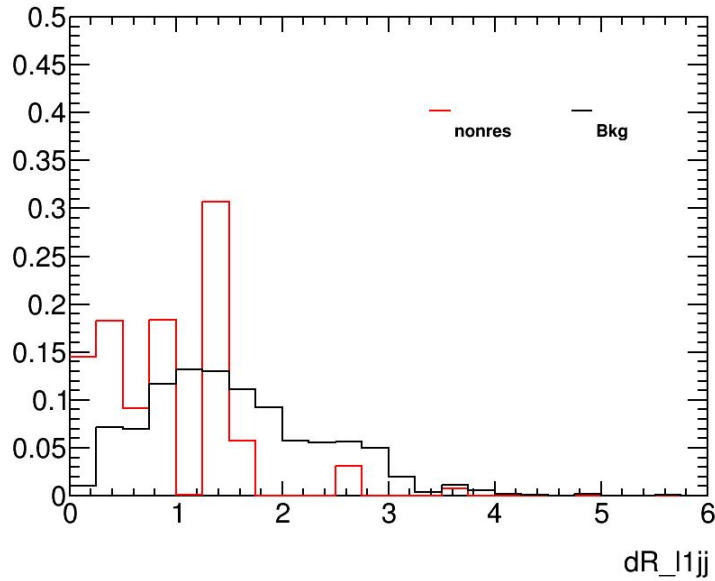
Weekly

Maosen Zhou
30 May, 2016

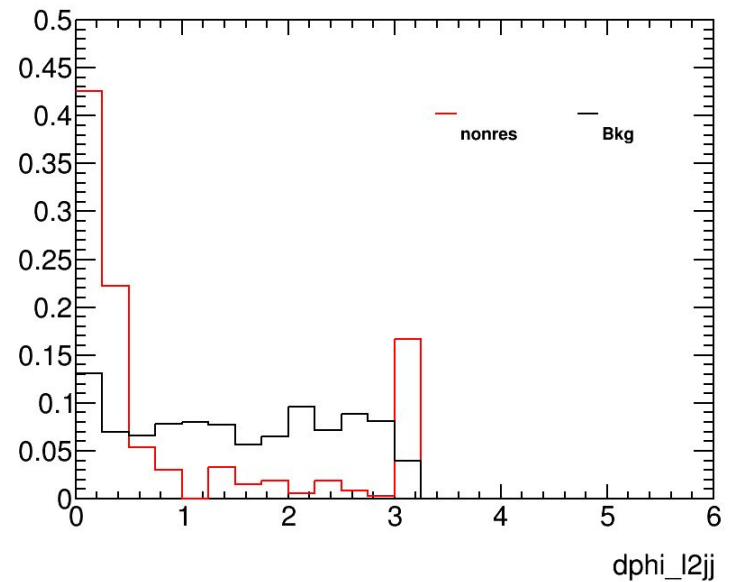
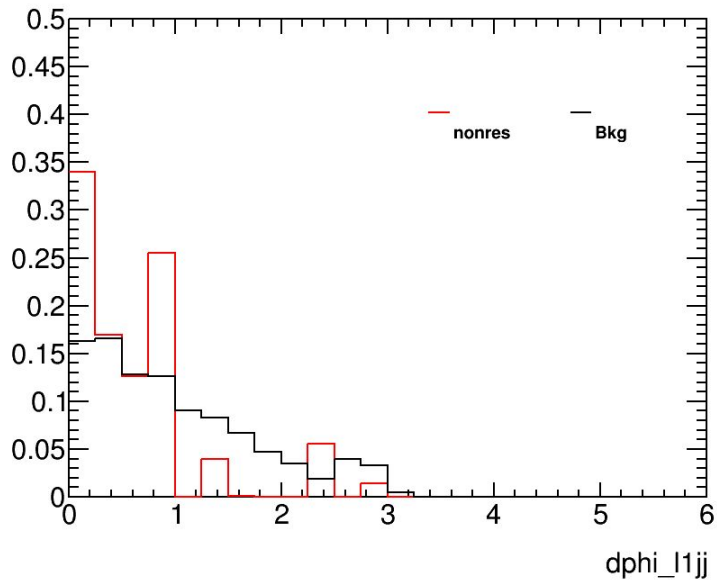
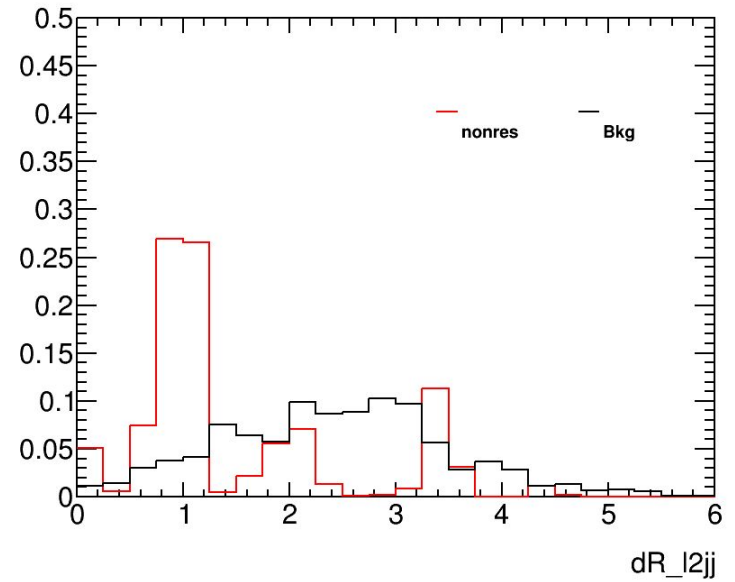
Introduction

- ❖ **Full non-res HIGG8D1 derivations ongoing;**
- ❖ **Have a look at 10k events;**

Kinematics



l, jj



cut flow

❖ generator process:

- $p p > h h > 4w > l^{+-} l^{+-} \nu \nu q q q q$;

❖ basic selections:

- Trigger;
- Object definitions;
- Overlap removal;
- b veto;
- two loose SS leptons;

	non-res
initial	100%
HIGG8D1	52%
basic selections	14.2%
≥ 4 jets, 2 tight leptons	4.2%

ee	mumu	emu
16.5%	33.3%	50.1%

To do list

- ❖ **Signal optimizations for non-res;**
- ❖ **Fix jet fakes excess in emu channel;**
- ❖ **Validate fake factor of electrons;**
- ❖ **Uncertainties.**

Back up