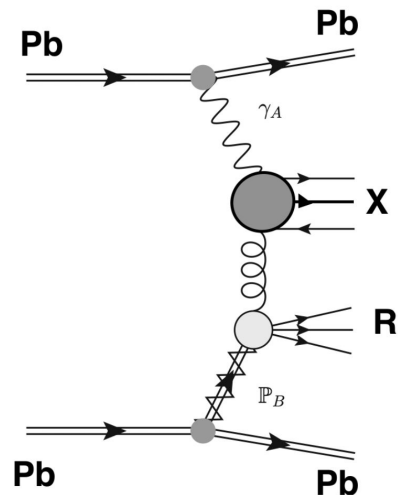


# Tau g-2 analysis

## Photonuclear background

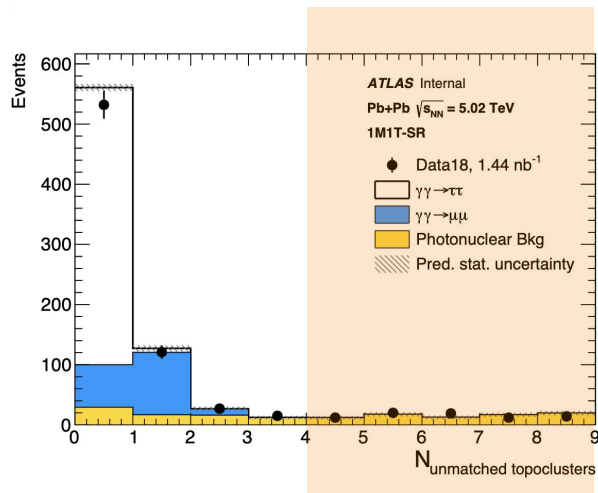
- Estimated using fully data-driven method
- Template distributions built from events having extra 'soft' track with low  $p_T < 0.5$  GeV:
  - **1M2T CR** - relevant for 1M1T
  - **1M4T CR** - relevant for 1M3T
  - negligible in 1M1E due to very high purity



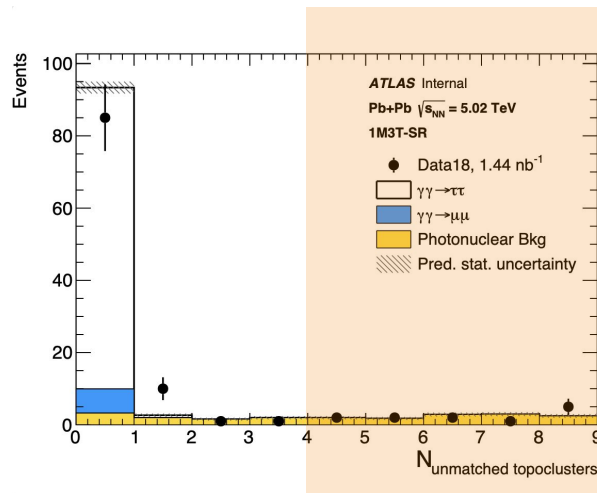
# Tau g-2 analysis

- Photonuclear background templates are normalized using ratio of cluster distribution in Control Regions and corresponding Signal Regions:

2018:



1M1T-SR

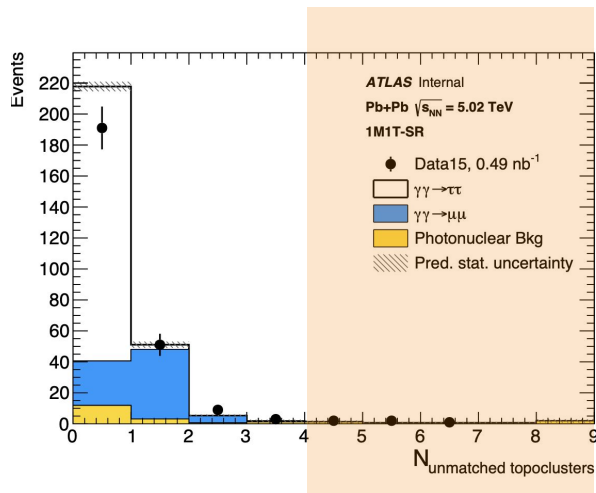


1M3T-SR

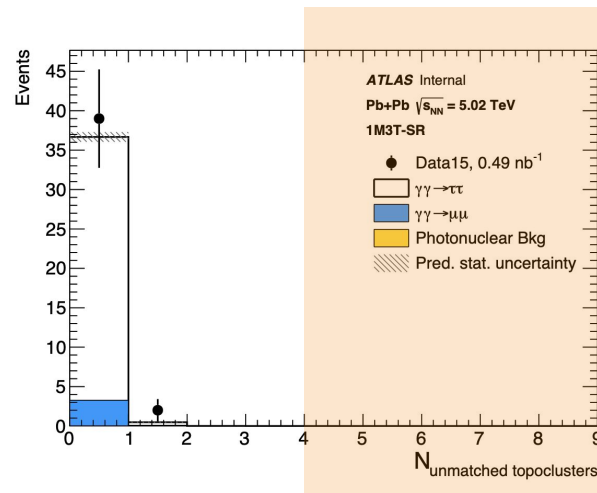
# Tau g-2 analysis

- Photonuclear background templates are normalized using ratio of cluster distribution in Control Regions and corresponding Signal Regions:

2015:

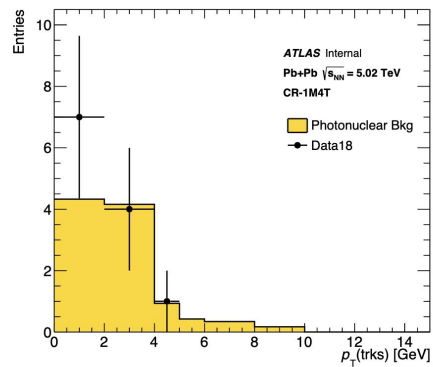
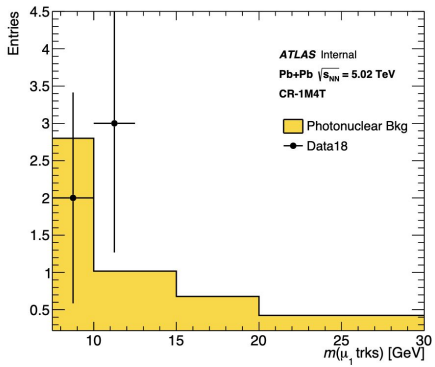
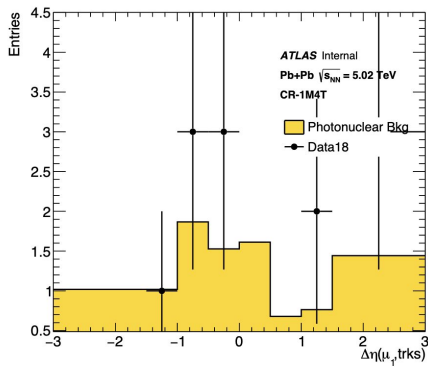
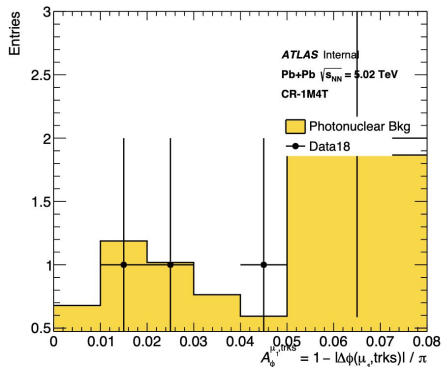
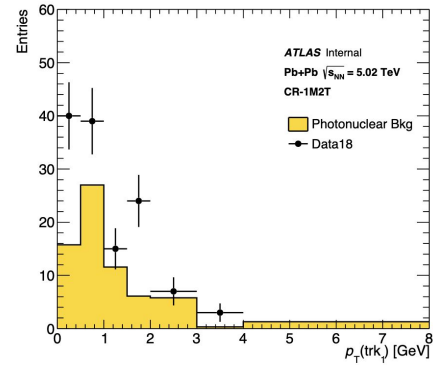
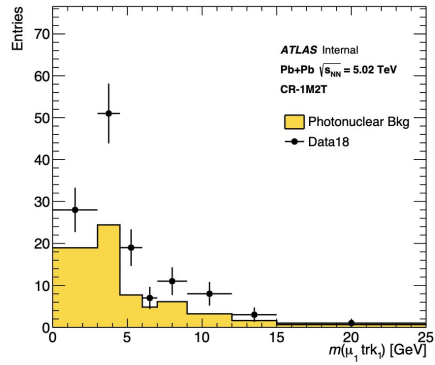
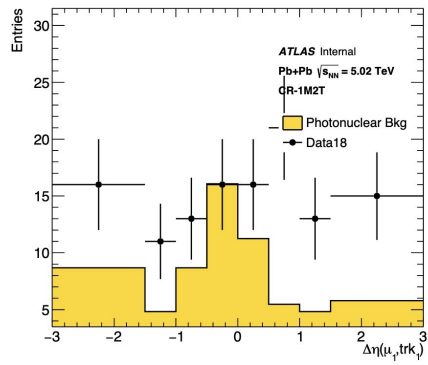
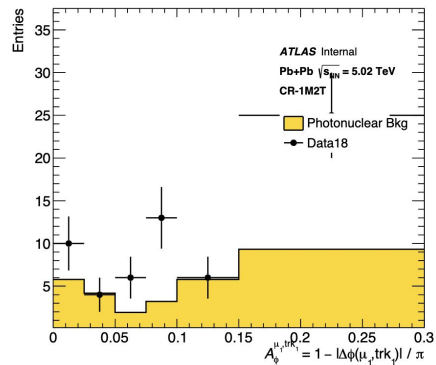


1M1T-SR



1M3T-SR

# 2018



# 2015

