

| Source                                   | Shapes | Uncertainty (%) | Processes affected     |
|--|--------|-----------------|------------------------|
| Integrated luminosity                    |        | 2.6             | Signal and backgrounds |
| Lepton ID/trigger                        | ✓      | 1               | Signal and backgrounds |
| Photon ID                                | ✓      | 1.5             | Signal and backgrounds |
| Pileup                                   | ✓      | 2               | Signal and backgrounds |
| JES/JER                                  | ✓      | 5               | Signal and backgrounds |
| b tagging                                | ✓      | 2.5             | Signal and backgrounds |
| Renormalization and factorization scales |        | 0.5 – 25        | Backgrounds            |
| PDFs                                     |        | 2.5 – 10        | Backgrounds            |
| Control region discrepancy               | ✓      | 10 – 20         | Backgrounds            |
| SR1/CR1 shape differences                | ✓      | 1 – 8           | Backgrounds            |
| SR2/SR1 shape differences                | ✓      | 10 – 50         | Backgrounds            |
| SUSY cross sections                      |        | 16 – 28         | Signal                 |