

| SF events                          | $M_{T2}(\ell\ell)$<br>[ GeV ] | 0-20            | 20-40           | 40-60           | 60-80           | 80-100          | 100-120         | $\geq 120$      |
|------------------------------------|-------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| SR1 <sub>Tags</sub>                | Predicted                     | $2979 \pm 68$   | $1277 \pm 30$   | $1644 \pm 35$   | $1712 \pm 37$   | $762 \pm 19$    | $91.9 \pm 6.1$  | $18.1 \pm 2.1$  |
|                                    | Observed                      | 3003            | 1266            | 1674            | 1671            | 798             | 85              | 16              |
| SR1 <sub>0Tag</sub>                | Predicted                     | $1350 \pm 33$   | $526 \pm 13$    | $656 \pm 15$    | $670 \pm 17$    | $289.2 \pm 7.6$ | $57.9 \pm 4.2$  | $61.8 \pm 5.8$  |
|                                    | Observed                      | 1367            | 539             | 648             | 692             | 301             | 63              | 59              |
| SR2 <sub>Tags</sub>                | Predicted                     | $888 \pm 30$    | $319 \pm 12$    | $363 \pm 14$    | $323 \pm 13$    | $90.5 \pm 5.5$  | $10.8 \pm 1.5$  | $7.43 \pm 0.98$ |
|                                    | Observed                      | 900             | 315             | 343             | 325             | 86              | 13              | 11              |
| SR2 <sub>0Tag</sub>                | Predicted                     | $487 \pm 16$    | $140.7 \pm 5.5$ | $161.9 \pm 5.9$ | $134.5 \pm 6.2$ | $39.6 \pm 2.7$  | $8.1 \pm 1.1$   | $30.6 \pm 3$    |
|                                    | Observed                      | 501             | 135             | 177             | 128             | 36              | 9               | 32              |
| SR3 <sup>ISR</sup> <sub>Tags</sub> | Predicted                     | $129.6 \pm 8.9$ | $29.6 \pm 2.1$  | $27.8 \pm 2.1$  | $22.2 \pm 1.9$  | $3.71 \pm 0.57$ | $0.47 \pm 0.42$ | $0.71 \pm 0.38$ |
|                                    | Observed                      | 123             | 27              | 28              | 38              | 4               | 1               | 1               |
| SR3 <sup>ISR</sup> <sub>0Tag</sub> | Predicted                     | $91.5 \pm 6.1$  | $20.1 \pm 1.8$  | $16.5 \pm 1.4$  | $13.7 \pm 1.4$  | $3.14 \pm 0.58$ | $0.78 \pm 0.36$ | $1.63 \pm 0.42$ |
|                                    | Observed                      | 92              | 26              | 17              | 12              | 1               | 1               | 2               |