| Sample                     | 1-tag           |                   | LL-tag                |                   | MM+TT-tag        |                   |
|----------------------------|-----------------|-------------------|-----------------------|-------------------|------------------|-------------------|
| $p_{\mathrm{T}}\mathrm{v}$ | < 120  GeV      | $> 120~{\rm GeV}$ | $< 120  \mathrm{GeV}$ | $> 120~{\rm GeV}$ | $< 120~{ m GeV}$ | $> 120~{\rm GeV}$ |
|                            | 2-jet           |                   |                       |                   |                  |                   |
| VH                         | 20              | 7.4               | 5.5                   | 2.0               | 19               | 7.0               |
| WZ,ZZ,WW                   | 800             | 135               | 73                    | 12.2              | 129              | 22                |
| $tar{t}$                   | 3490            | 213               | 1023                  | 49                | 3180             | 137               |
| Single top                 | 385             | 44                | 40                    | 5.8               | 96               | 12                |
| W+l                        | 245             | 12                | 3.7                   | 0.4               | 0.3              | 0.0               |
| W+cl                       | 166             | 18                | 5.8                   | 0.6               | 1.0              | 0.1               |
| $W+\mathrm{hf}$            | 90              | 13                | 7.5                   | 0.7               | 4.9              | 0.6               |
| Z+1                        | 29410           | 4180              | 648                   | 101               | 41               | 6.2               |
| Z+cl                       | 12130           | 1622              | 421                   | 64                | 71               | 9.7               |
| Z+hf                       | 21090           | 2853              | 1916                  | 287.7             | 2858             | 414               |
| Total                      | $69360 \pm 280$ | $9123 \pm 86$     | $4271 \pm 50$         | $524.6 \pm 7.9$   | $6473 \pm 76$    | $607 \pm 13$      |
| Data                       | 69313           | 9150              | 4313                  | 517               | 6501             | 570               |
|                            | 3-jet           |                   |                       |                   |                  |                   |
| VH                         | 7.4             | 3.9               | 1.5                   | 0.9               | 4.9              | 2.8               |
| WZ,ZZ,WW                   | 347             | 100               | 22                    | 6.9               | 29               | 8.7               |
| $tar{t}$                   | 2170            | 182               | 486                   | 29                | 1476             | 74                |
| Single top                 | 144             | 22                | 18                    | 3.0               | 41               | 6.5               |
| W+l                        | 76              | 7.1               | 1.4                   | 0.2               | 0.1              | 0.0               |
| W+cl                       | 57              | 8.9               | 2.3                   | 0.4               | 0.4              | 0.1               |
| $W+\mathrm{hf}$            | 40              | 6.4               | 3.1                   | 0.8               | 0.8              | 0.4               |
| Z+1                        | 8870            | 1913              | 190                   | 46                | 12               | 2.7               |
| Z+cl                       | 4650            | 949               | 164                   | 38                | 25               | 5.7               |
| Z+hf                       | 5790            | 1223              | 497                   | 121               | 766              | 180               |
| Total                      | $22720 \pm 150$ | $4430 \pm 56$     | $1403 \pm 20$         | $245.2 \pm 5.2$   | $2365 \pm 43$    | $280.9 \pm 8.4$   |
| Data                       | 22662           | 4436              | 1428                  | 253               | 2394             | 283               |