## **Cumulative Number of Topoclusters** Fraction of Events/4 TC **ATLAS** Simulation Internal HL-LHC $\langle u \rangle = 200$ Minimum Bias $E_{T}^{TC} > 2.0$ $10^{-1}$ - Calo 422 — Calo 420 $10^{-2}$ $10^{-3}$ $10^{-4}$ 10<sup>-5</sup>, 20 60 80 180 200 220 40 100 120 140 160 **Number of Topoclusters**