



Plots above show the results of the ‘SlidingWindow’ approach to compute the p_T density (ρ) as a function of η . The input is **cell towers** (as opposed to LC Topo clusters).

Left: 2D histo filled with the median ρ value for each η bin including all $E>0$ cell towers within the window. The areas of the clusters are based on the Voronoi definition.

Right: TProfile taken of the left-hand plot to show mean values as a function of η .

- Simulated VBF Higgs ($m_H = 2600$ GeV) events
- $\mu \sim 200$
- **FCal** geometry (r7769 w/ fixed noise)
- Total $N_{\text{evts}} = 20\text{k}$

NOTE: Cell towers are at the EM scale. Next step is to apply area-based correction to jets using these event-dependent ρ values directly (based on η of the jet) and compare pileup rejection.