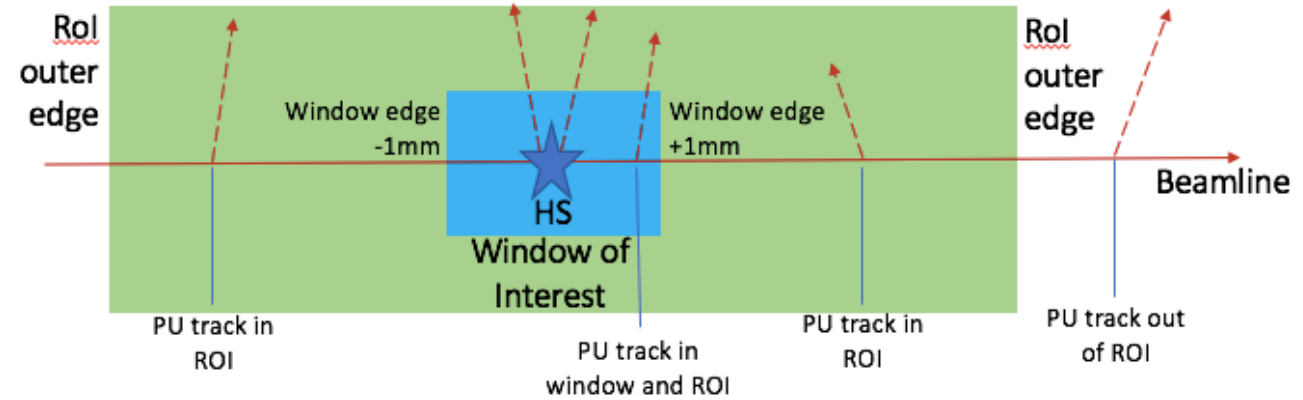


Low-Pt Tracking for ATLAS in Nominal LHC Pileup

- We have developed a Low-Pt tracking setup that can be used in high pileup environments
 - Uses per-event region-of-interest (RoI) to reconstruct tracks longitudinally near hard scatter
 - To be used for specific analyses that profit from accessing low-pT charged particles in dedicated reconstruction campaigns
- Extending tracking down to ~ 200 MeV can actually be done in generic Run 2 pileup conditions with relatively high efficiency and low fake rate
 - In the very-low Pt regime, fake rate tends to become significant, but this can likely be mitigated with offline selections



Plots focus on tracks in the region ± 1 mm from HS (what analyses care about)

