Flashes, tracks, vertices → **TPC Interactions** → **Muon candidate** → **Neutrino candidate**

Flash in beam window	**Collect TPC interactions**	**Flash-object matching**	**Select the muon candidate**	**Minimum track quality**	**Muon quality**	**Pick the neutrino object**
A 50 total PE cut is applied to the flash in the beam spill. This ensures there is activity during beam spill time.	TPC interactions are collected from Pandora reconstructed objects. One interaction can represent the final state of a neutrino interaction, or a cosmic ray.	A flash matching is run between the beam flash and all the TPC interactions in the event. Only the one with the best match is kept.	dQ/dx v.s. track length is used for a muon consistency check. Cuts are also applied to the hit spatial dispersion.	Track quality requirements are applied to the muon candidate track. A small hit spatial dispersion w.r.t. the fitted track is required.	Multiple coulomb scattering momentum v.s. range momentum is used for a quality check and to remove broken tracks.	If the TPC interaction survived all previous cuts and has the reconstructed vertex inside the fiducial volume, is selected as a neutrino candidate interaction.