

IC Local Meeting: Weekly Update

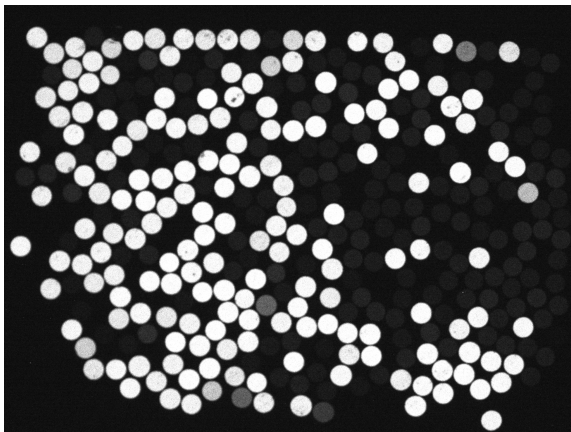
Hin Tung Lau

March 20, 2020

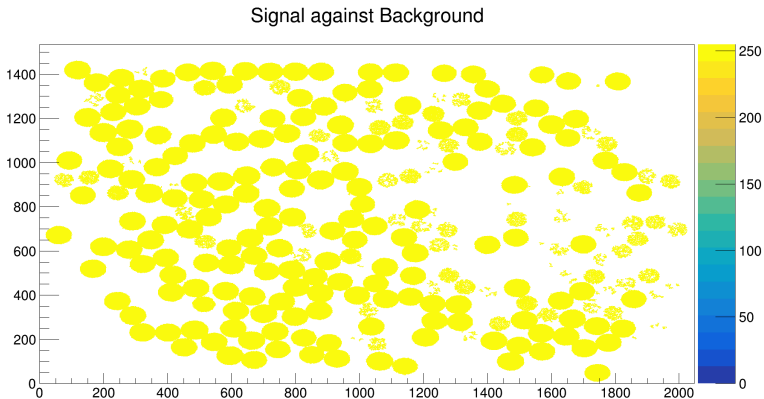
- Updated preCDR Overleaf with simulation plots redone with BDSIM-1.3.3-dev on lx machines.
- Finished S1 end station, extraction, S2 in vitro and end station and S2 in vivo section edits on Overleaf.
- Included explicit mention emphasizing the pessimistic assumption of the 127 MeV beam emittance and mentioning the effects of adiabatic damping would contribute to a smaller beam emittance.

- Oliver still designing support structure to be able to polish clear fibre ends.
 - Will send around screenshots when he can though limited in what he can do with IC closed
- Familiarising myself with old image analysis scripts and applying to data taken from Clatterbridge

A frame taken from one of the video clips of pigtail at Clatterbridge



Need to pick out the spots corresponding to scintillating fibres to obtain spot coordinates

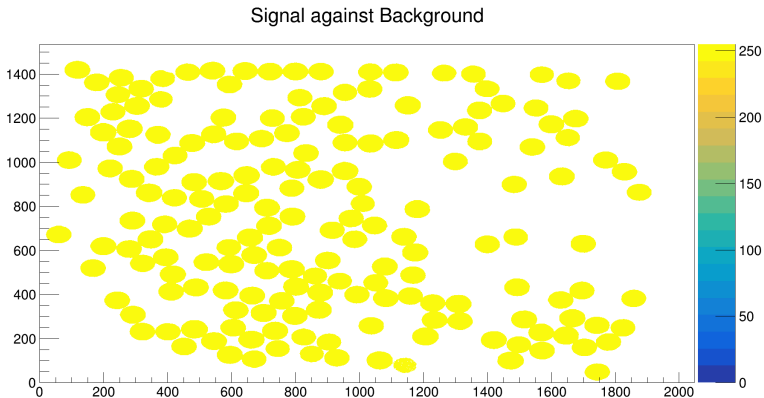


Problems

- Bright specks are being picked out
- Some clear fibres are picked out, some not
- Some spots are grouped

SmartPhantom Updates – Including Gaussian filtering

Blurring added + some tweaking

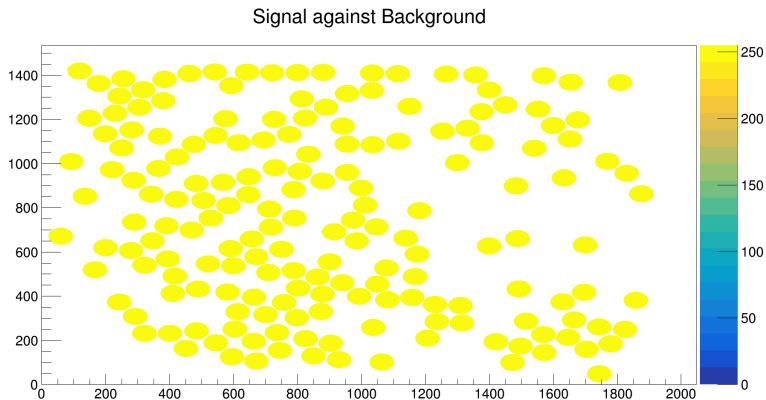


Problems

- Some clear fibres are picked out, some not
- Some spots are **grouped**

SmartPhantom Updates – Manually designating scintillating fibres

Used paint tool to select spots manually + no blurring



Problems

- Limited by my ability to correctly identify and mark a scintillating fibre

Using coordinate file to read image

