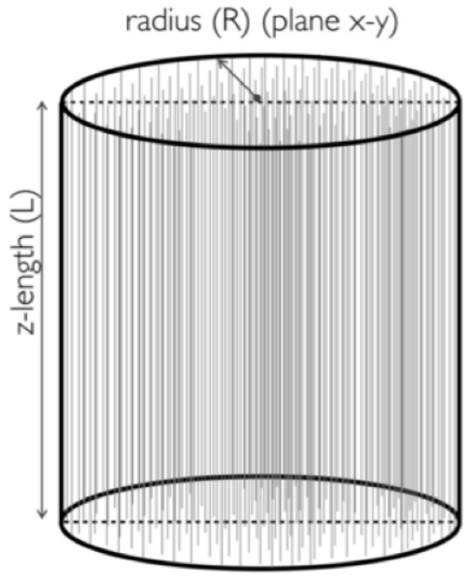
LiquidO: A new approach

– LiquidO is a novel neutrino detection approach with **two main features**:

1) Use an opaque scintillator

Main purpose: **stochastically confine light near its creation point**, to preserve the precious topological information of particle interactions

2) Light collection with a dense fiber array



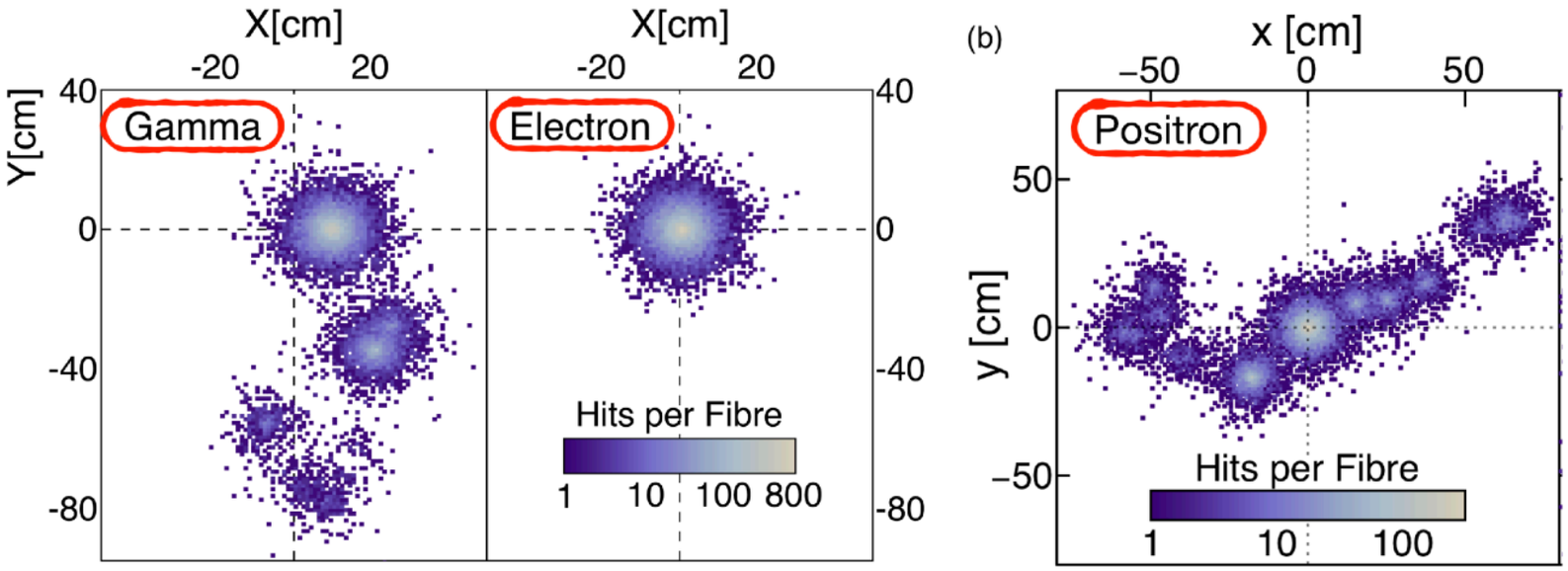
Archetypical LiquidO detector

– Unprecedented capabilities:

- Imaging down to the MeV scale
- Affinity for doping well beyond current limits

– Promising application in nuclear energy and security

- Improved signal/background at surface
- Self-segmenting detector



(Gamma and Electron are 2 MeV, positron is 1 MeV)

arxiv:1908.02859 , arXiv:1908.0334