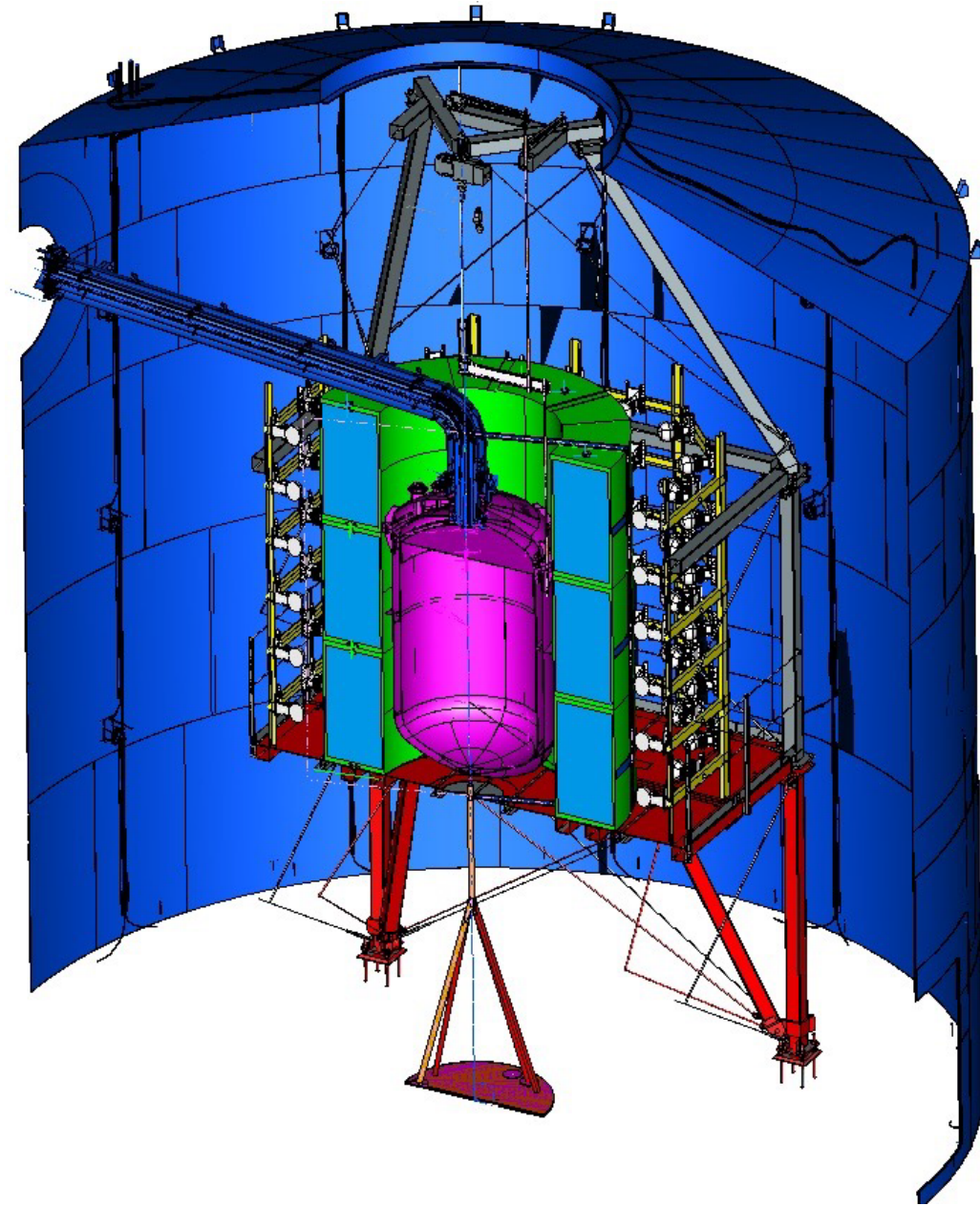


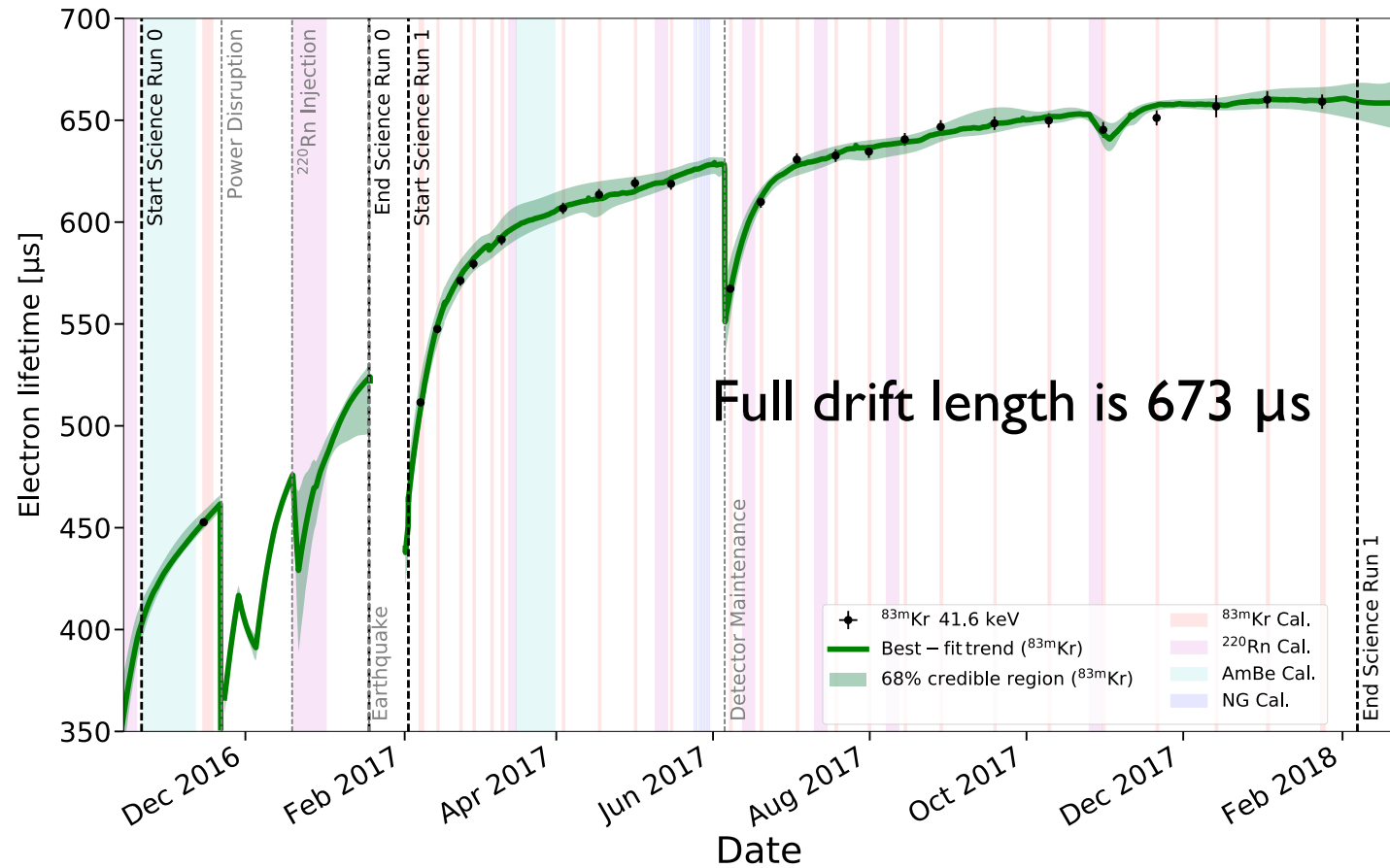
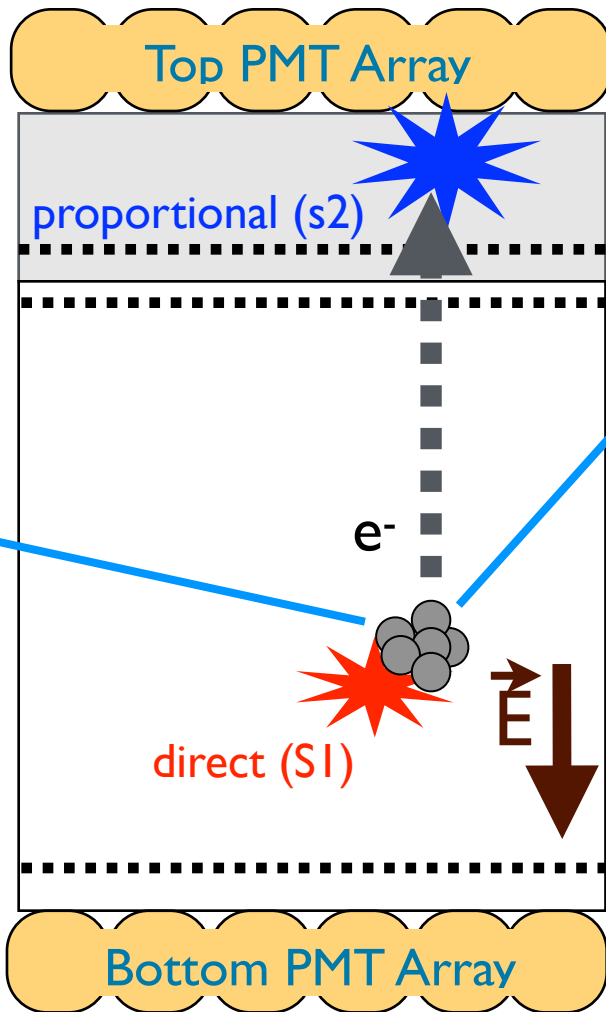
XENONnT TDR

- New XENONnT systems
 - Liquid Xe purification
 - Continuous Radon distillation
 - LS Neutron Veto
 - Expand emergency Xe storage
 - AP is Technical Coordinator
- XENONnT received official approval from LNGS SC and director in March 2018
- Stop XENONIT in Fall '18 and start upgrade



Electron Lifetime

I. Xe continuously purified to remove electronegative impurities

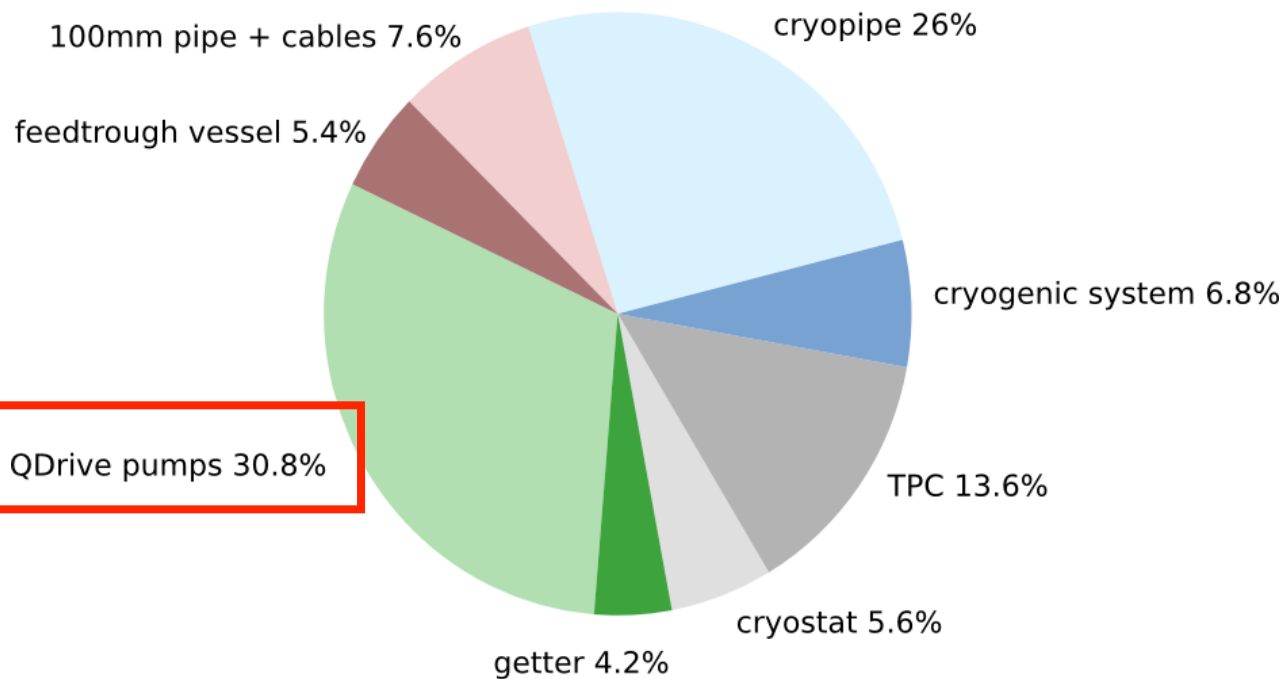


- Need more mass flow through purification
 - Better Gas pumps
 - Liquid Xe purification

^{222}Rn emanation

2. ^{222}Rn is emanated by all materials, most critical BG for XENONnT: 10x reduction

Measured ^{222}Rn emanation ($\sim 10 \mu\text{Bq}/\text{kg}$ total)



Magnetically coupled pump
to be installed May 2018