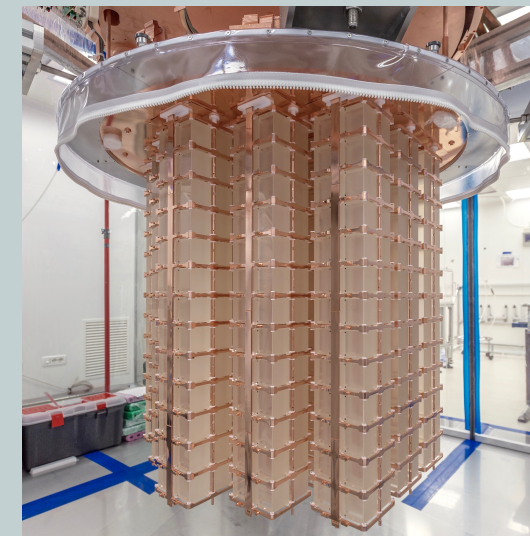
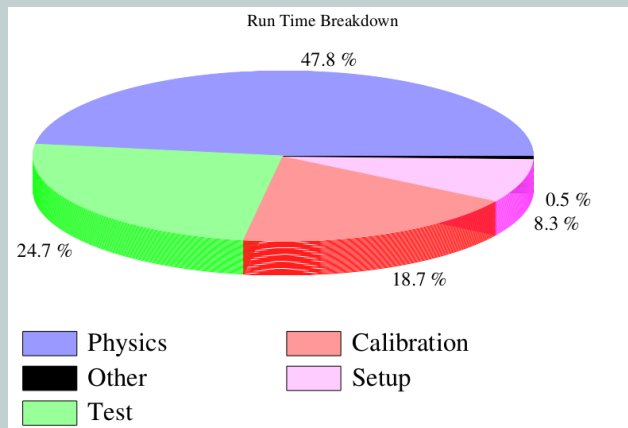


- Bolometric detector searching for $0\nu\beta\beta$ in TeO_2 and is a result of a long running series of experiments.
- 742kg detector with 988 TeO_2 crystals arranged into 19 towers with 52 crystals.
- Each crystal instrumented with a NTD thermistor and a Si heater.
- Detector housed in a dilution refrigerator designed to operate at 10mK.

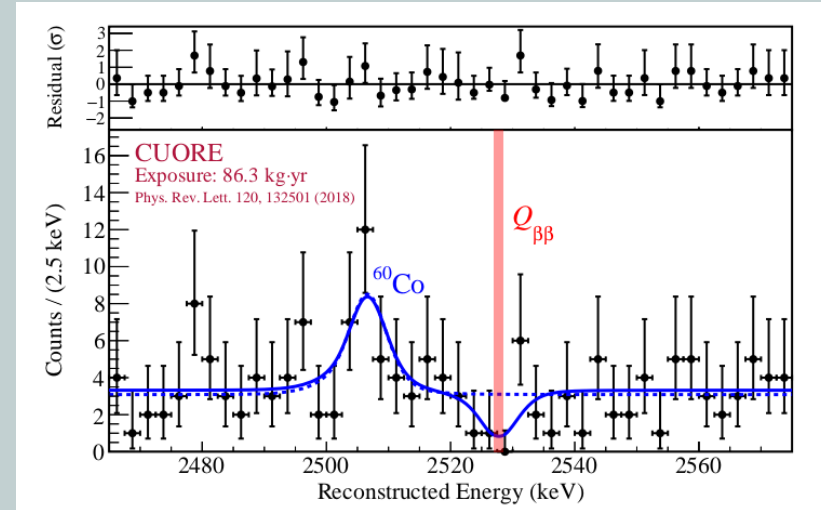


- Completed detector assembly and installation in 2016, and first pulses seen in January, 2017.
- We accumulated few months of data in 2017 and published the first results in October.
- Data divided into two datasets with some improvements in between.

$0\nu\beta\beta$ Results from CUORE

- Accumulated a total of 86.6 kg·yr of TeO_2 exposure.
- After applying data quality cuts, 155 events left in the region of interest (ROI).

TeO ₂ Exposure	37.6 kg·yr (Dataset 1)	
	48.7 kg·yr (Dataset2)	
FWHM (physics) @2527.5 keV	7.7±0.5 keV	
	Bayesian	Rolke
Median expected sensitivity	7.0×10^{24} yr	7.6×10^{24} yr
Half life limit (90% C.L)	1.3×10^{25} yr	2.1×10^{25} yr
Half life limit (90% C.L) with CUORE-0 and Cuoricino	1.5×10^{25} yr	2.2×10^{25} yr



- Background rate of 0.014 ± 0.002 counts/(keV·kg·yr)
- Combined results with Cuoricino and CUORE-0 provides the most stringent limits on ^{130}Te $0\nu\beta\beta$ decay.