

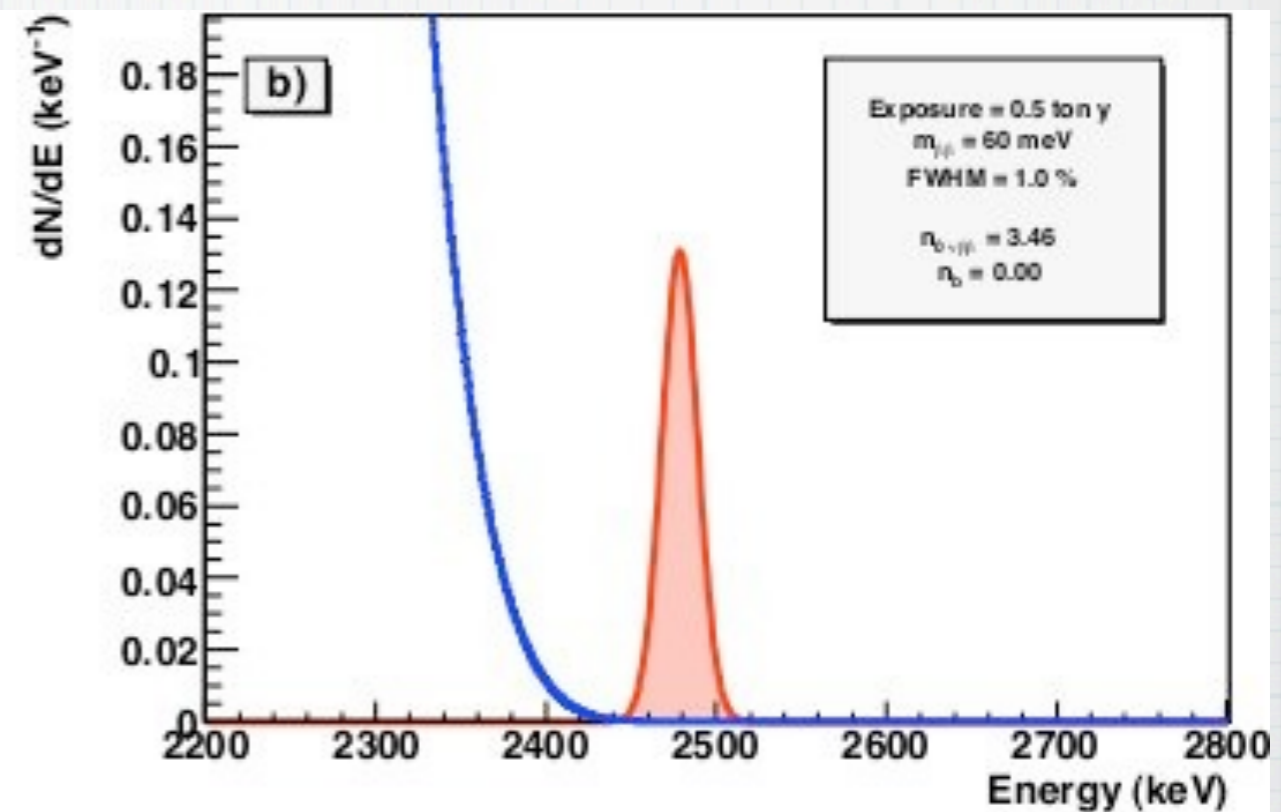
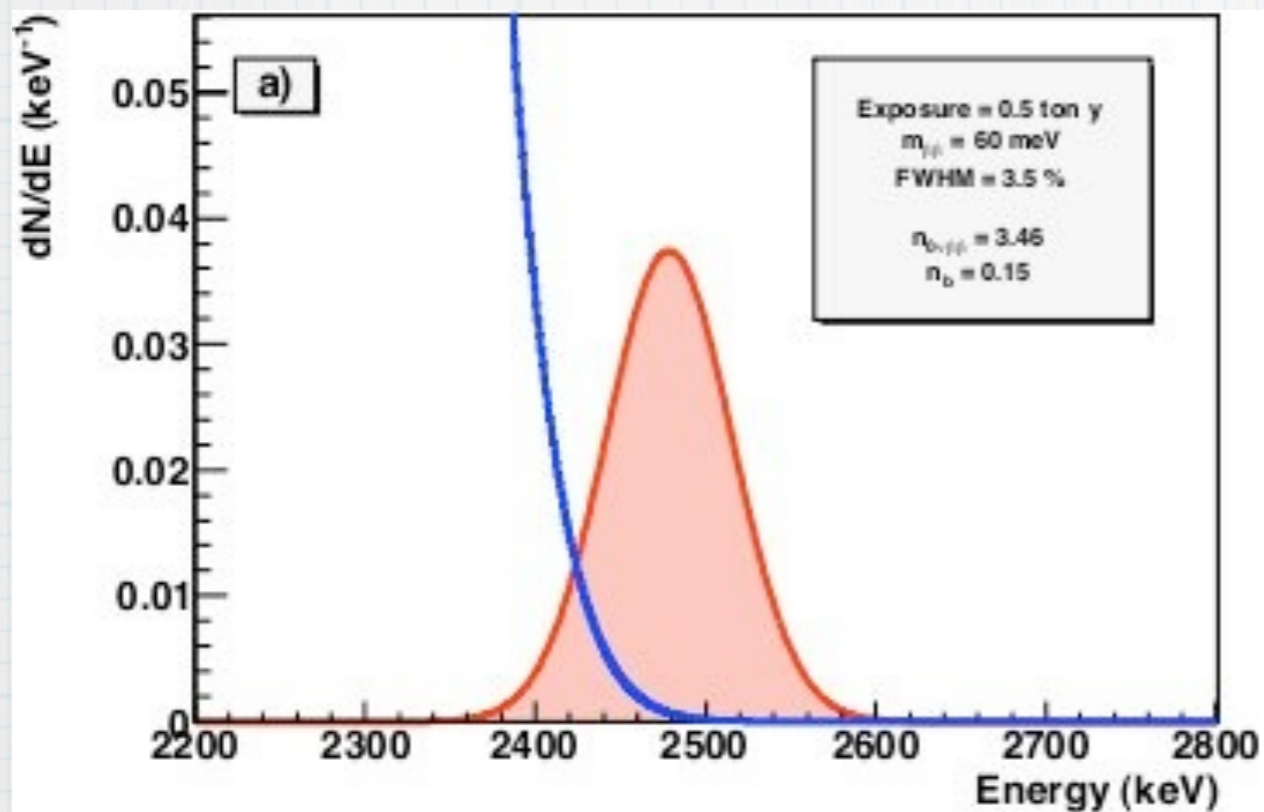
NEXT

**A Neutrino Experiment with a high pressure Xenon TPC for
neutrinoless double beta decay searches**

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Instituto de Física Corpuscular - Valencia, Spain

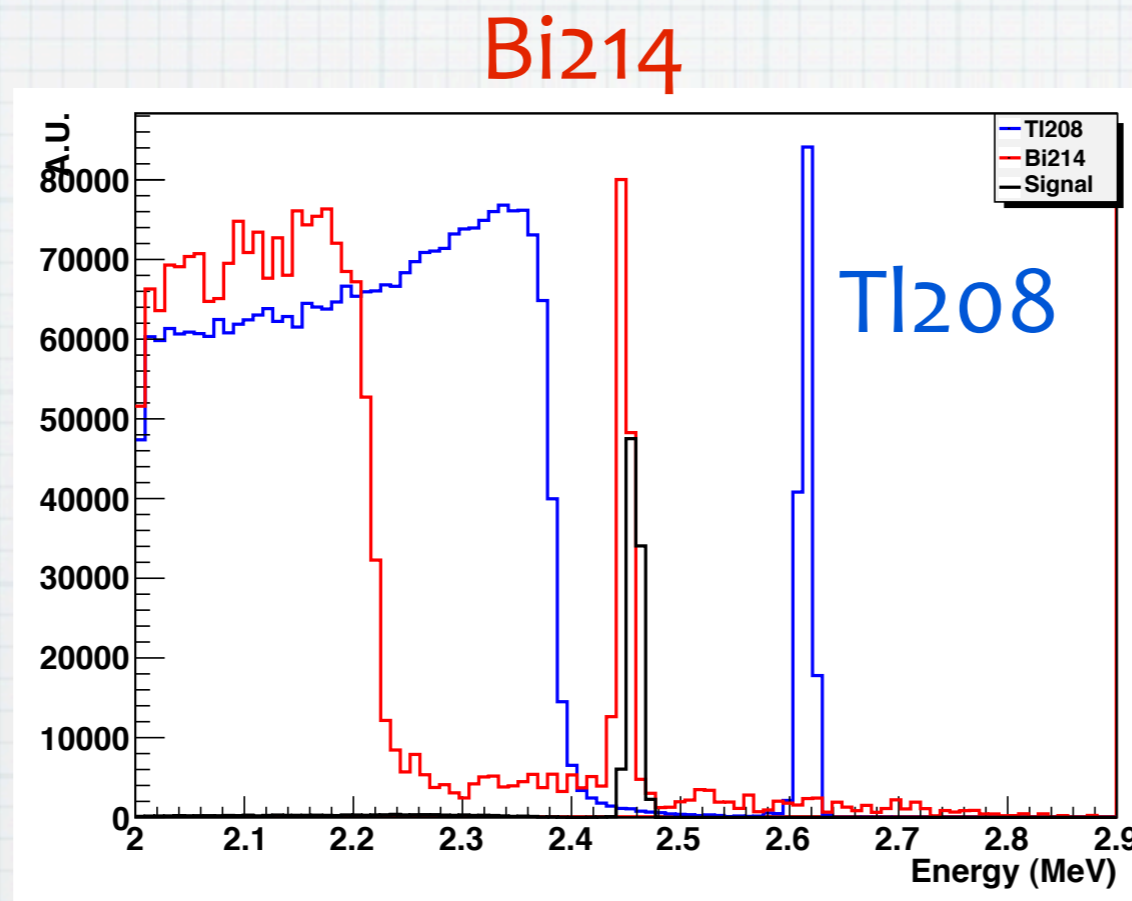
Competition in bb0nu race

1. Excellent energy resolution
2. High background rejection



Competition in bb0nu race

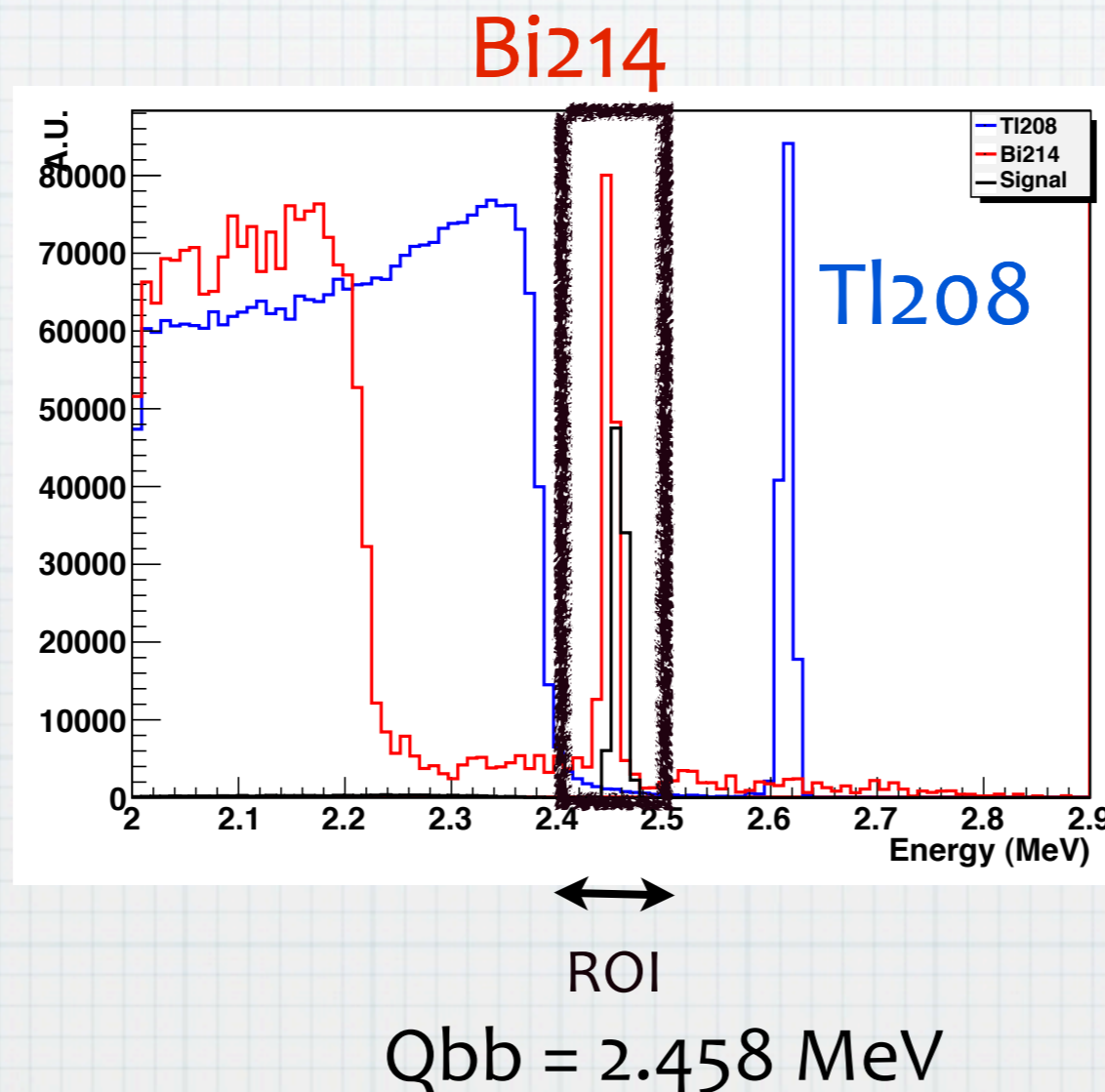
1. Excellent energy resolution
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$$Q_{bb} = 2.458 \text{ MeV}$$

Competition in $bb0\nu$ race

1. Excellent energy resolution
2. High background rejection

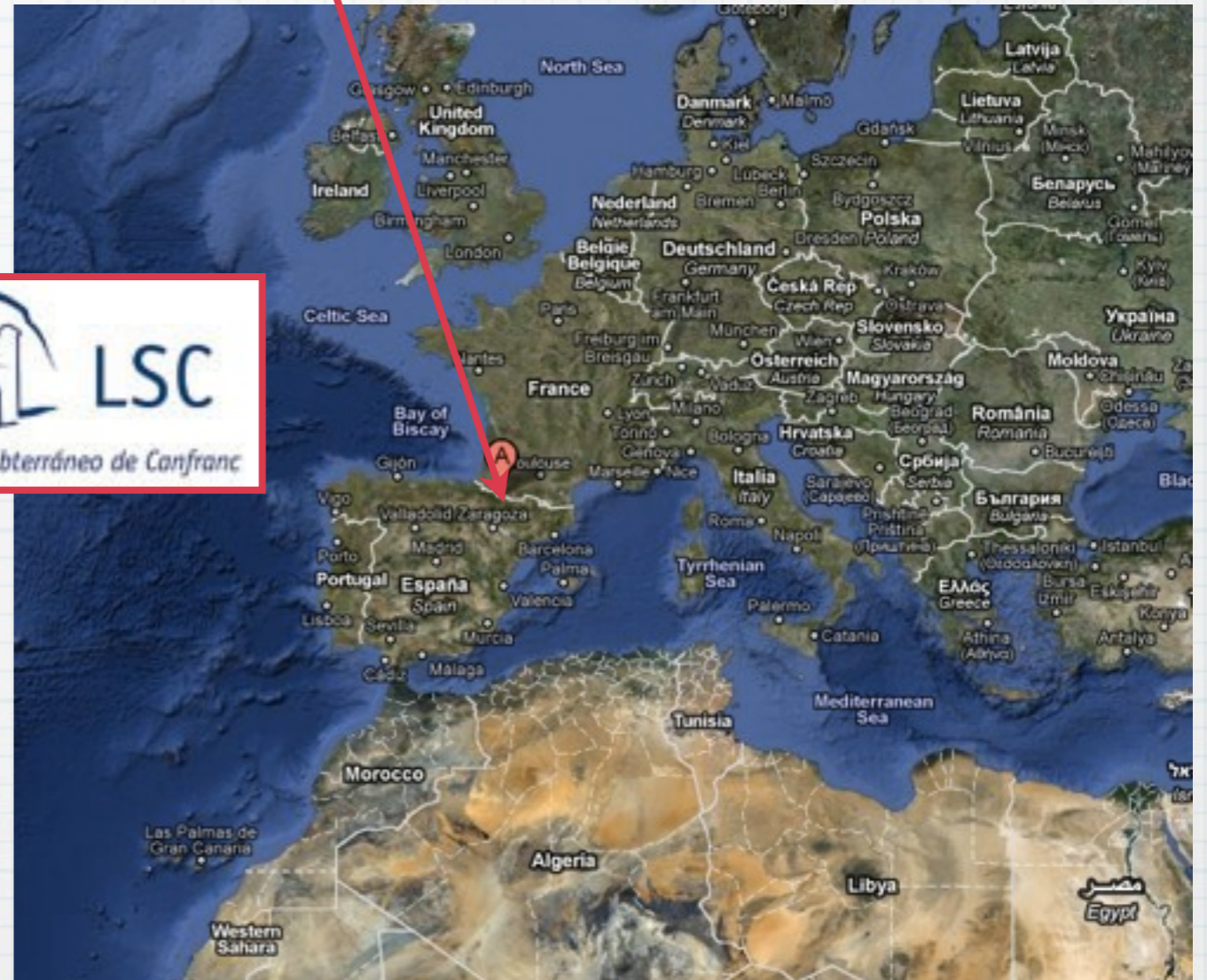


Low background

1. Shield from external radiation: Canfranc Underground Lab

2. Highly radiopure materials

3. Copper/lead castle to shield background from lab walls



Topology to reject background

- 2 electrons which lose their energy interacting with the gas

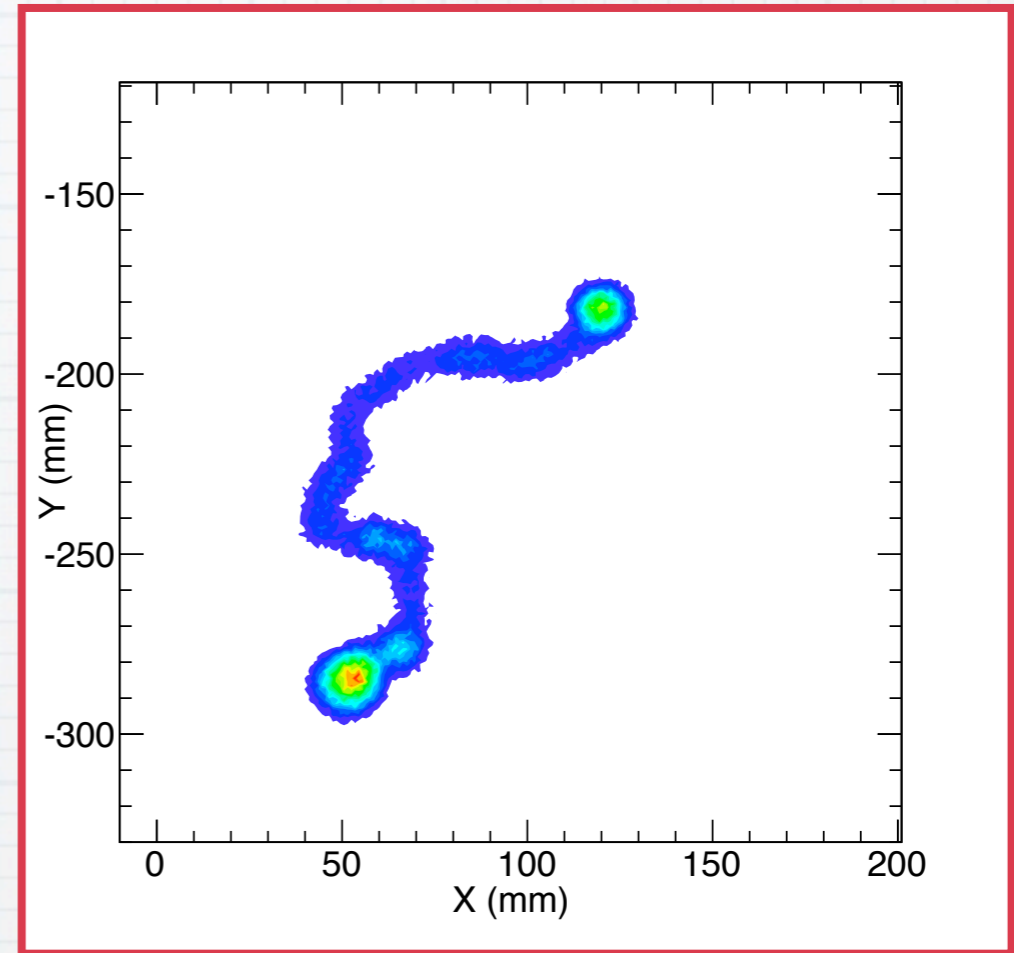


One twisted track, by multiple scattering

- They lose more energy at the end of the track



Two blobs at the two ends of the track



Spaghetti with 2 meat balls

More stuff on poster!

