

IF+NF+CF Panel Questions

What are your top 3 wish-list items for new instrumentation, for the next generation of neutrino or dark matter experiments?

The claim is often made by dark matter experiments that they can "also do double beta decay and solar neutrinos", and by double beta decay experiments that they "can also do searches for dark matter." Are these reasonable claims and should funding go to just one experiment? If not, where are there places for co development of instrumentation and methodologies that are common, and how should this happen given existing funding agency 'stovepiping'?

Low-background argon---such as underground argon---is something that can leverage physics across many different areas, from low-energy physics at DUNE to dark matter searches, to clean shielding for double beta decay experiments. What is needed here to lead to a case where kilotonne quantities can be produced and available, and will the costs be manageable?

Generally speaking, are the challenges of developing instrumentation and detectors with a broad physics reach worth the effort, or should we try more to focus experiments on individual physics topics to best optimize their respective sensitivities?

The availability of funding for "blue sky" R&D is limited, if the choice was between funding another project, or putting more money into such R&D (and if you had a choice...) what would you do?

There is lots of R&D for detectors with directional sensitivity to low- and high-energy neutrinos and DM particles: Given that background becomes more and more challenging when backgrounds get large, when does directional sensitivity become required to achieve the science goals?