



Fermilab

July 15, 2004

Adam Para
MS 220

Dear Adam,

Thank you for the Letter of Intent for FLARE: Fermilab Liquid Argon Experiments, which we have designated P-942. As you pointed out in the Letter, liquid argon has significant advantages for detectors in a number of potential neutrino-physics experiments. In order to help consider the Laboratory response to the request for R&D support for next year, I forwarded your Letter to the Fermilab Physics Advisory Committee (PAC) and sought their reaction.

We enclose the comments from the PAC.

As you see, the PAC has some appreciation of the merits of liquid argon technology especially with a view to building a very large neutrino detector. Your Letter of Intent introduces a number of possible experimental applications, but it does not chart a clear and complete path to establishing the feasibility of the technology for such a very large detector.

Given the comments from the PAC, and the extreme tightness of resources at the Laboratory available for new initiatives, we are not in a position to start up a major R&D program right now. We may, however, be able to have some people at the Laboratory work with you to get a better understanding of what would be required for such an R&D program to succeed.

The Letter of Intent also raises the possibility of a modest-size liquid argon detector for a Fermilab neutrino experiment. We see this as an independent issue. We would expect that the small scale detector, its R&D and its fabrication, would be addressed by a group dedicated to an experiment with the device.

Sincerely,

Michael Witherell

Attachment

cc: K. Stanfield
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