

T-962

Test of a Liquid Argon TPC

Gina Rameika

PPD Engineering Customer's
Meeting

January 29, 2007

Who

- Yale - Bonnie Flemming, post-docs & students
- Fermilab - Rameika, C. James (beam, trigger/timing,) MINOS
- MSU - Bromberg + engineer (electronics)

Project description

- Location -
 - MINOS Near Detector Hall
 - On beam axis
 - Just upstream of MINOS/PEANUT
- Vessel size
 - Dictated by ODH calculation
 - Estimate 300 liters is OK
 - ~30 cm radius, 1 m length



System/Support Requirements

- Cryogenic Vessel
- Purification and recirculation system
- Plumbing for Liquid Argon
- TPC
- Readout electronics
- Trigger
- Data acquisition

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- Trigger - FNAL
- Data acquisition - Yale

PPD Support Support Request

- Cryogenic Vessel - consult on design
- Purification and recirculation system - design, construct
- Plumbing for Liquid Argon - design, construct
- Installation support
- Safety Reviews
 - Operate first in the Surface Building
 - Then install underground

Yale has DOE \$\$ for M&S, and some design

Status

- MOU in preparation
- Contacting ES&H about safety review process - ODH critical issue
- Evaluating engineering resource requirements

Schedule

- ASAP
- Before MINERvA....
- Summer '07, Winter '08????