MERIT Installation Issues

CERN Meeting

June 20, 2006
The MERIT Experiment (3/3)

To be installed in the **TT2A tunnel** upstream of the nTOF target

**Data taking:** “two-weeks” at the PS startup in 2007
Experiment at CERN

Hyd Pump & Controls in TT2

Access Shaft

TT10

TT2A

MERIT

ISR Tunnel
The Cold Valve Box
The Cryo Heater
Hg target is a self-contained module inserted into the magnet bore
Two containment barriers between the Hg and the TT2A tunnel environment
Hydraulic pump will be in TT2, personnel in Bldg 272 remote control room
The Hg Jet Control Rack
The Hg Jet Control Rack (cont)
The MERIT Experiment (2/3)

Hg-jet hydraulic system

Solenoid

Target chamber

Hg container

Proton Beam

BROOKHAVEN
NATIONAL LABORATORY

Harold G. Kirk
The Hg Jet System

Hydraulics
Instrumentation
Optical diagnostics
Hg drain & fill (without opening secondary)
Hg extraction (in event of major leak in primary containment)
Passive filtration
The Pulsed Solenoid
Rigging the Solenoid at MIT

Movie of moving the solenoid at MIT is found at:

http://198.125.178.188/bnlpulsed/MERITMagRig.mpg