

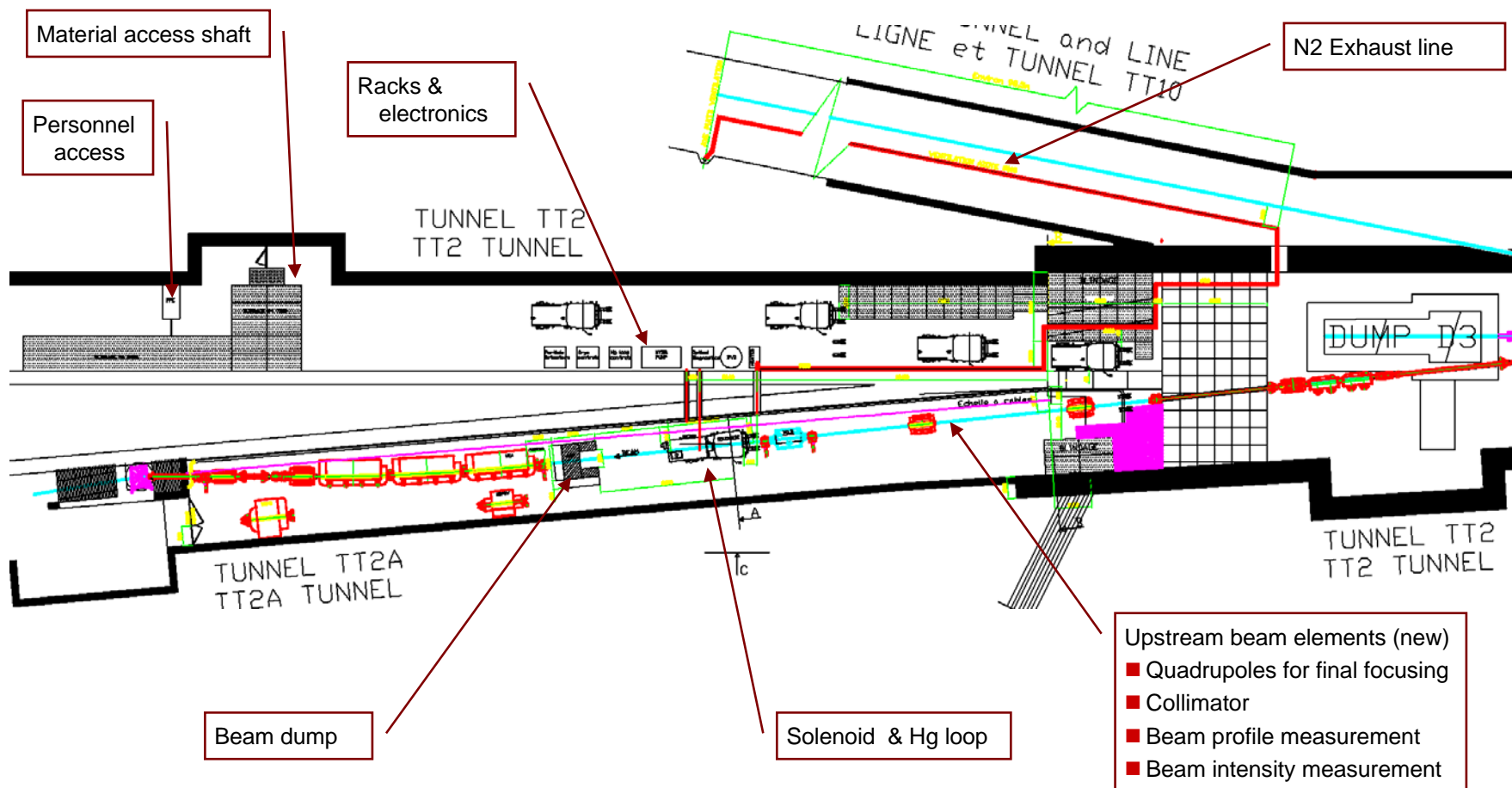
The MERIT High-Power Target Experiment

H. Kirk (BNL)

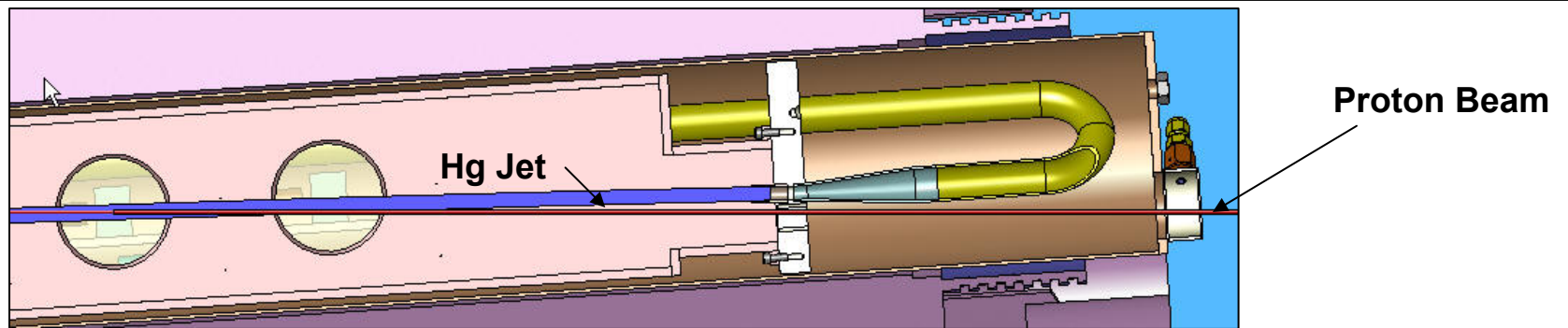
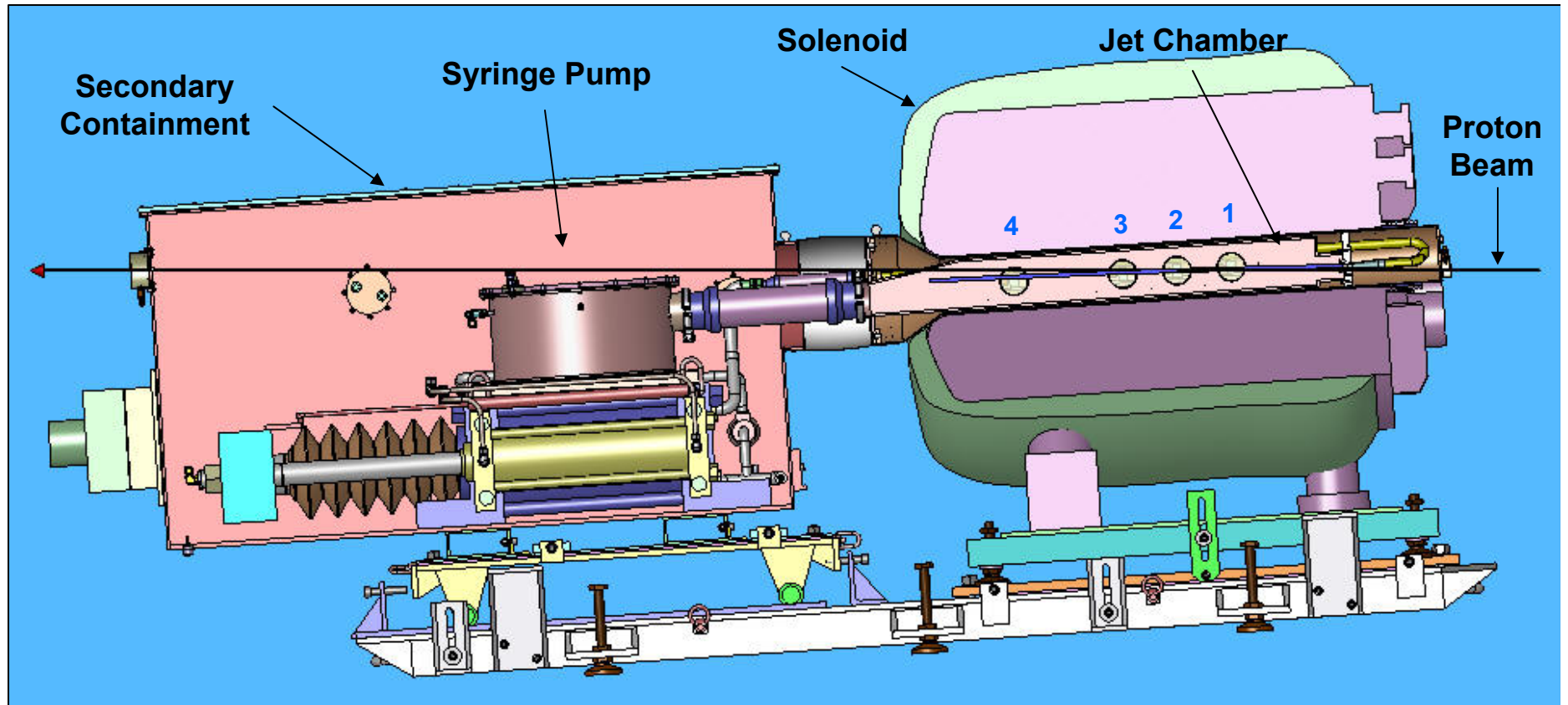
CERN

November 1, 2007

MERIT Experiment in the TT2a Area



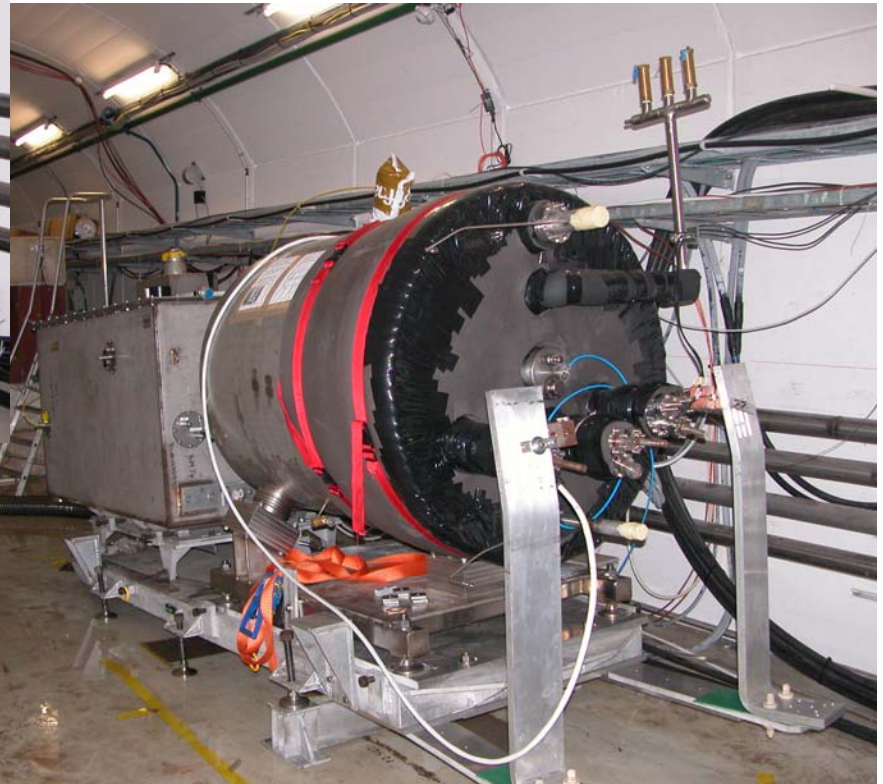
Sectional view of the MERIT Experiment



Installed in the CERN TT2a Line



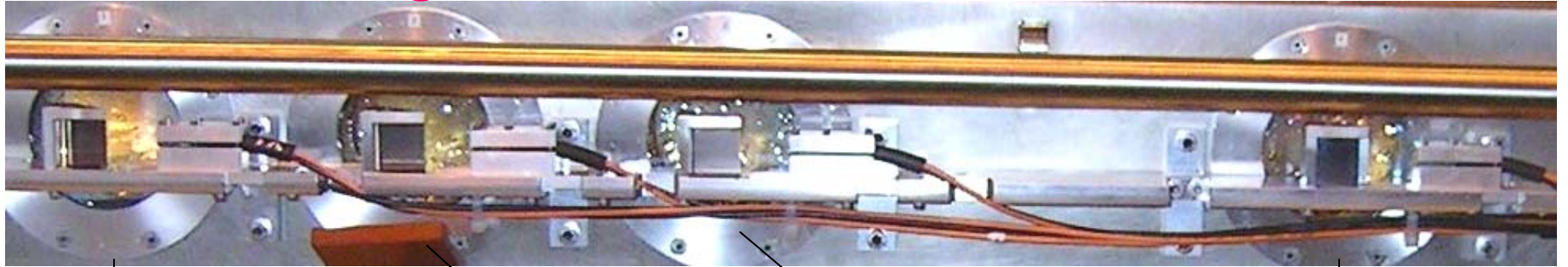
Before Mating



After Mating and Tilting



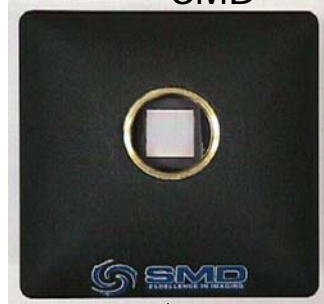
Hg Jet March 3, 2007 @ MIT



FastVision 1



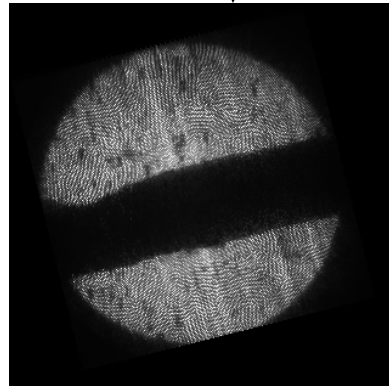
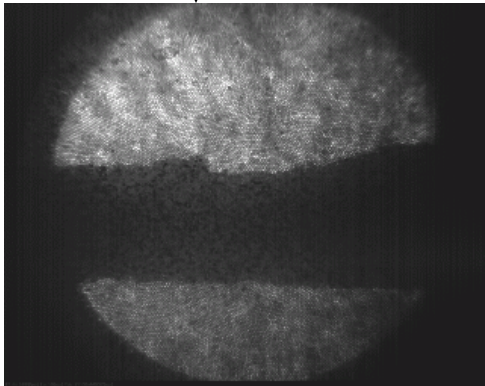
SMD



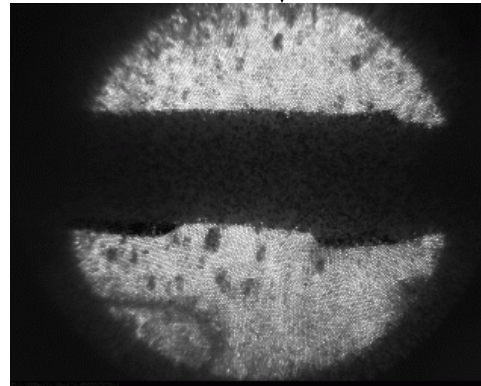
FastVision 2



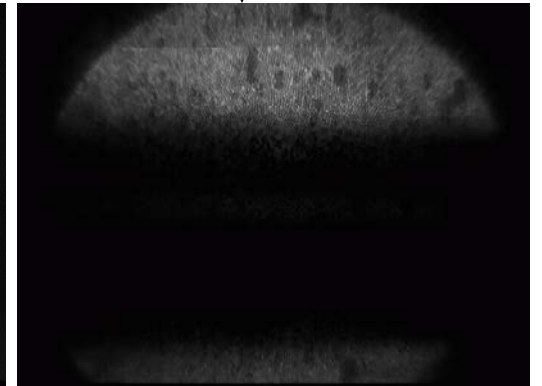
video camera



0.1 ms/frame



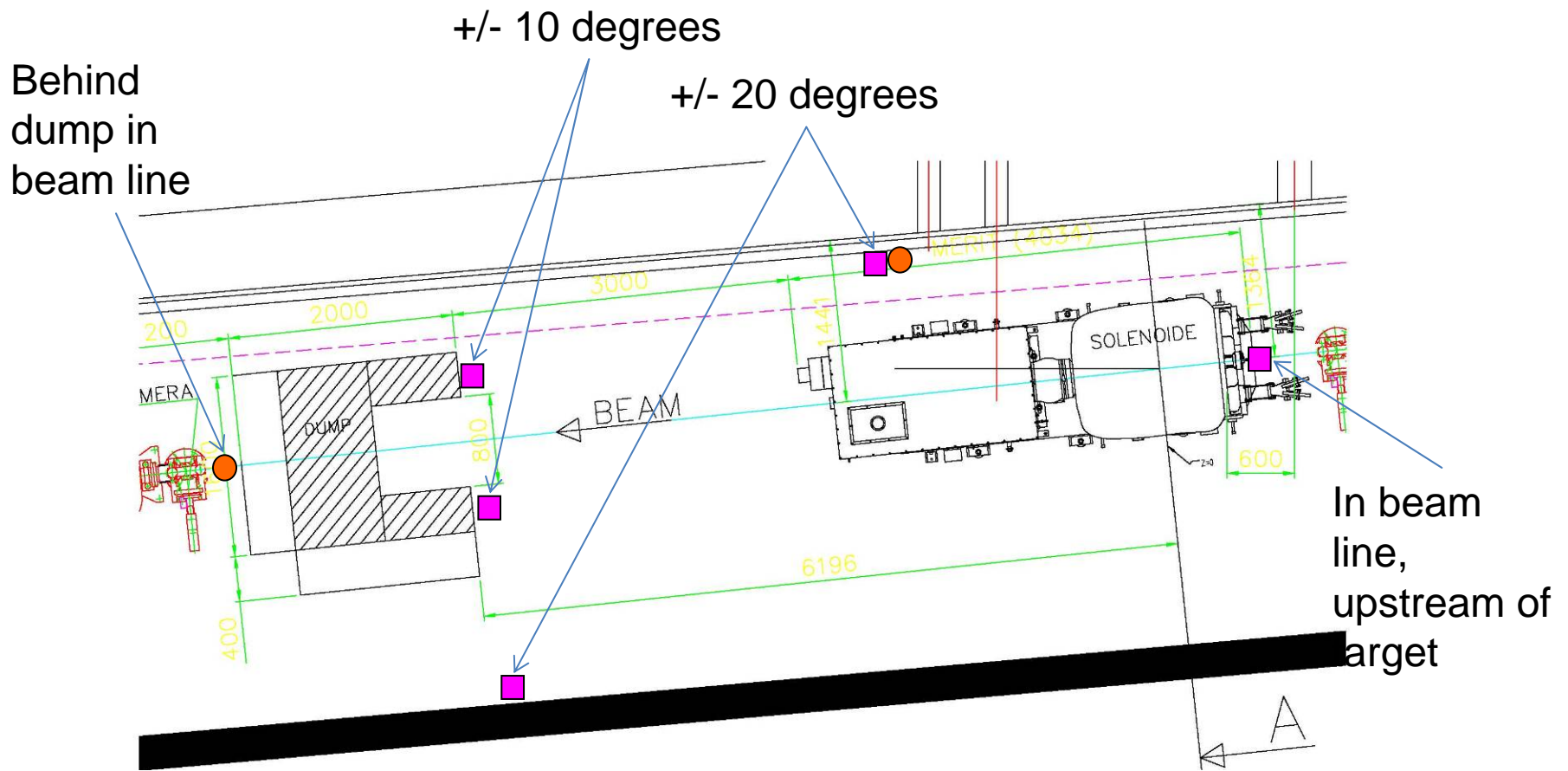
2 ms/frame



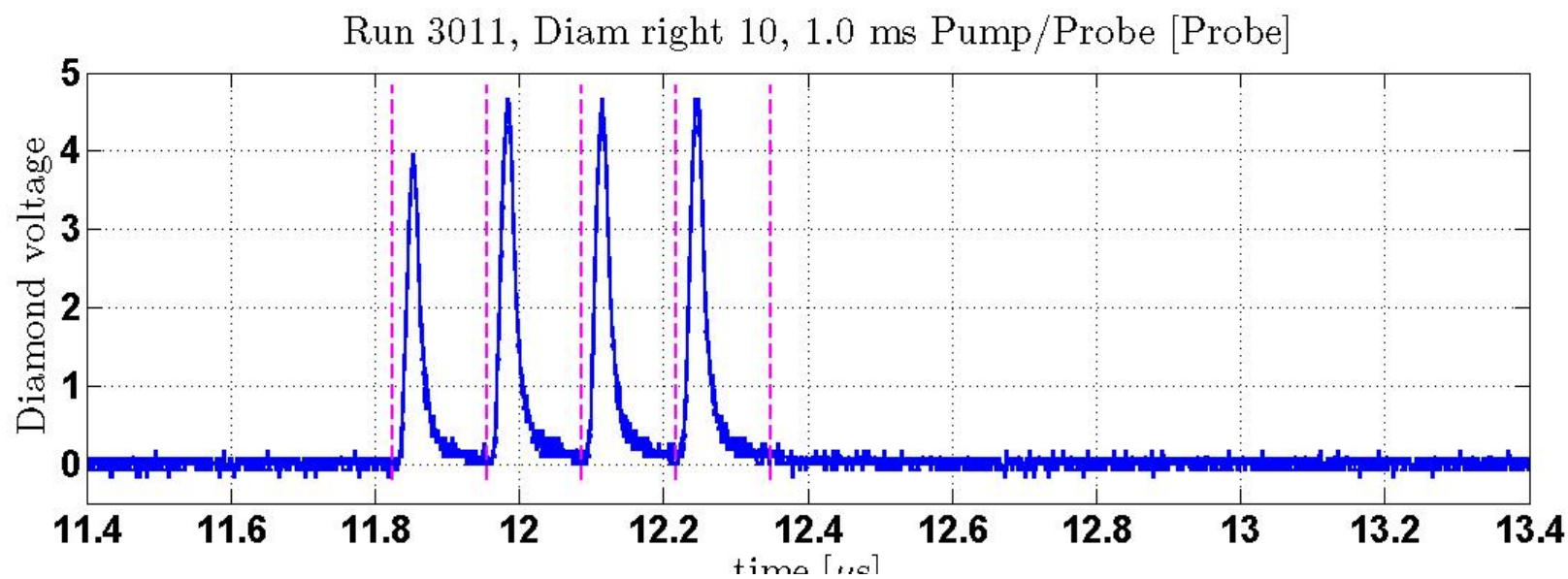
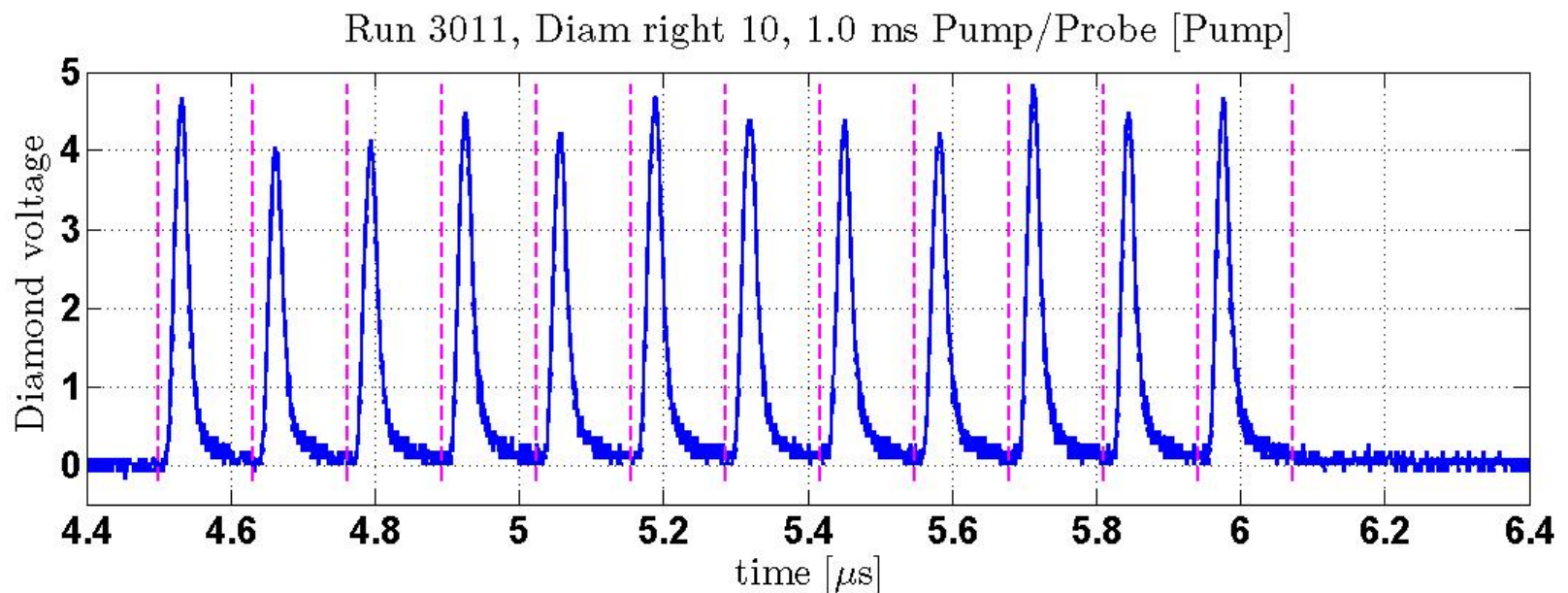
20 m/s Hg jet, 7 Tesla field

The Pump/Probe Detectors

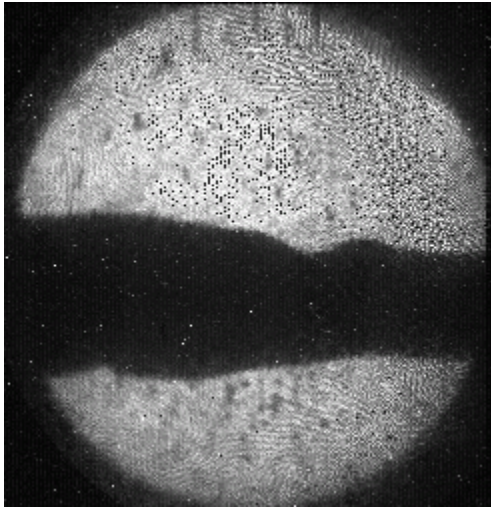
- ACEM (Aluminum Cathode Electron Multiplier)
- Multiplier Diamond



A 3TP Pump Pulse and a 1TP Probe Pulse with 1ms delay

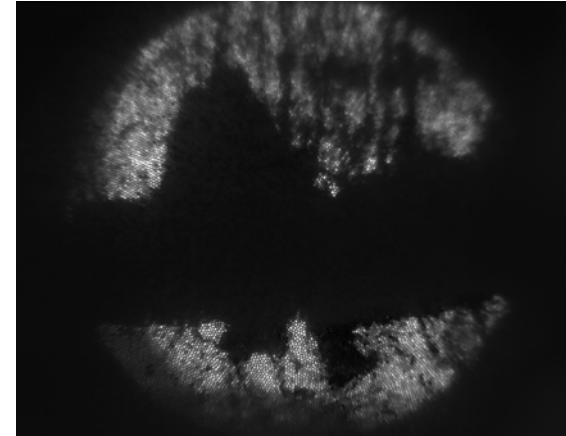


Beam 8035, B=7T, V=15m/s Oct. 31, 2007

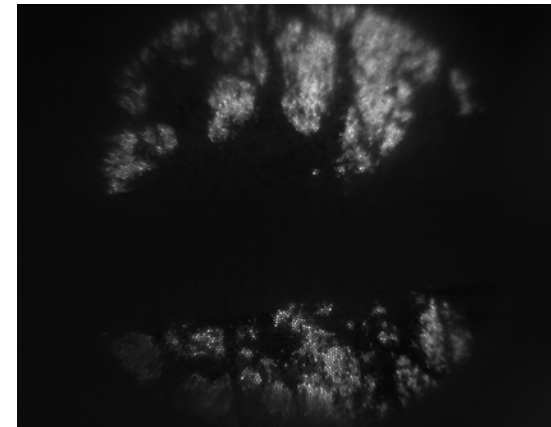


Viewport 2, 100 μ m/frame, Total 1.6ms

**Pump 15TP
Probe 5TP
dT = 2.3 μ s**

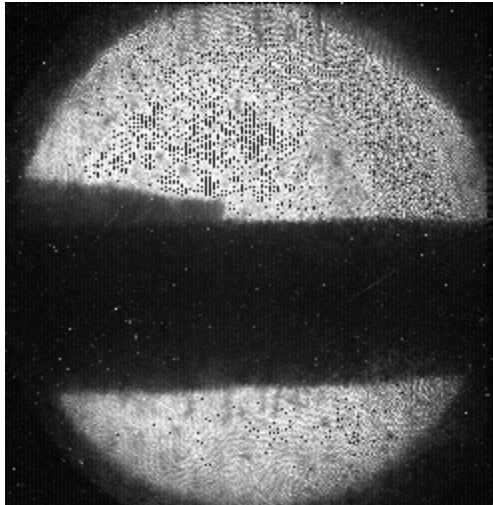


Viewport 3, 6ms



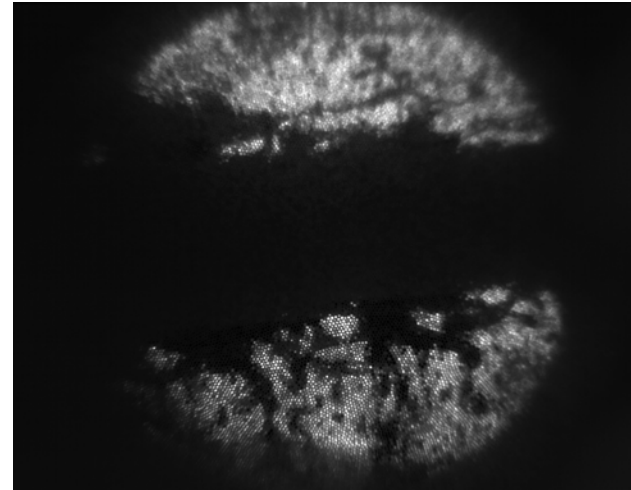
Viewport 3, 10ms

Beam 8037, B=7T, V=15m/s Oct. 31, 2007

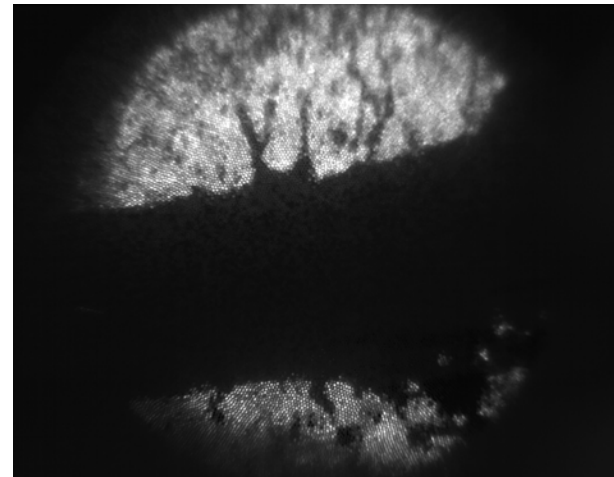


Viewpoint 2, 100 μ m/frame, Total 1.6ms

**Pump 15TP
Probe 5TP
dT = 700 μ s**



Viewpoint 3, 16ms



Viewpoint 3, 12ms