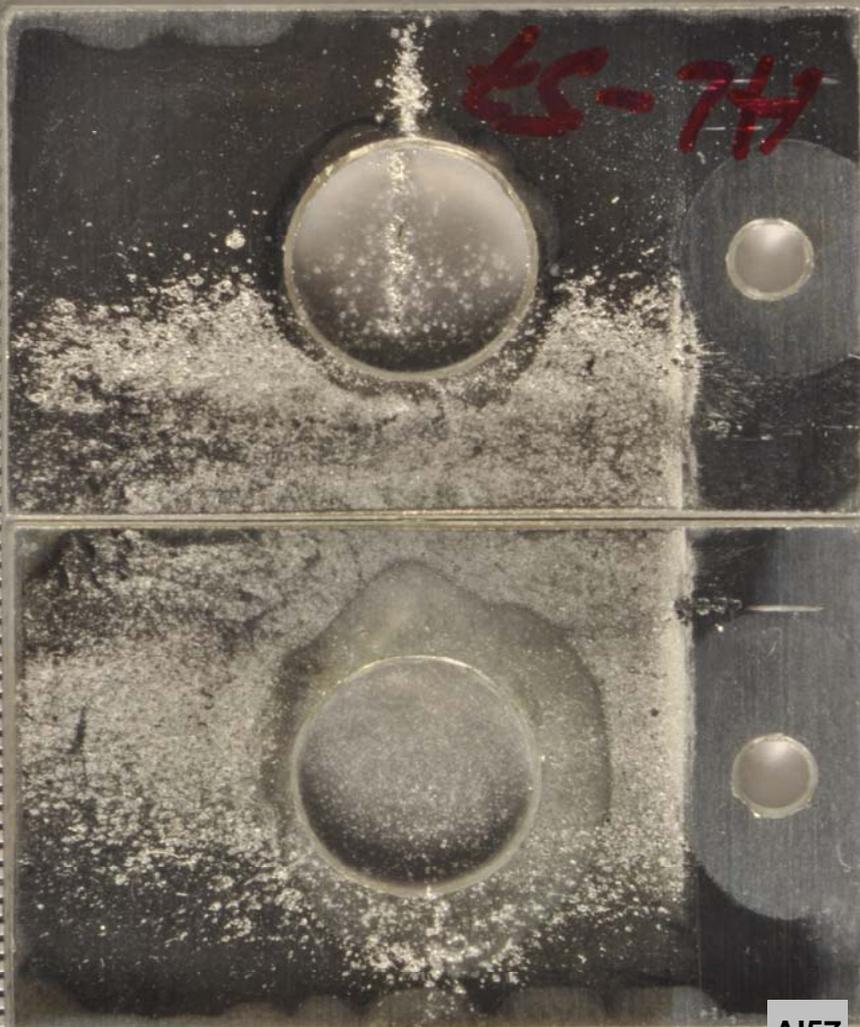


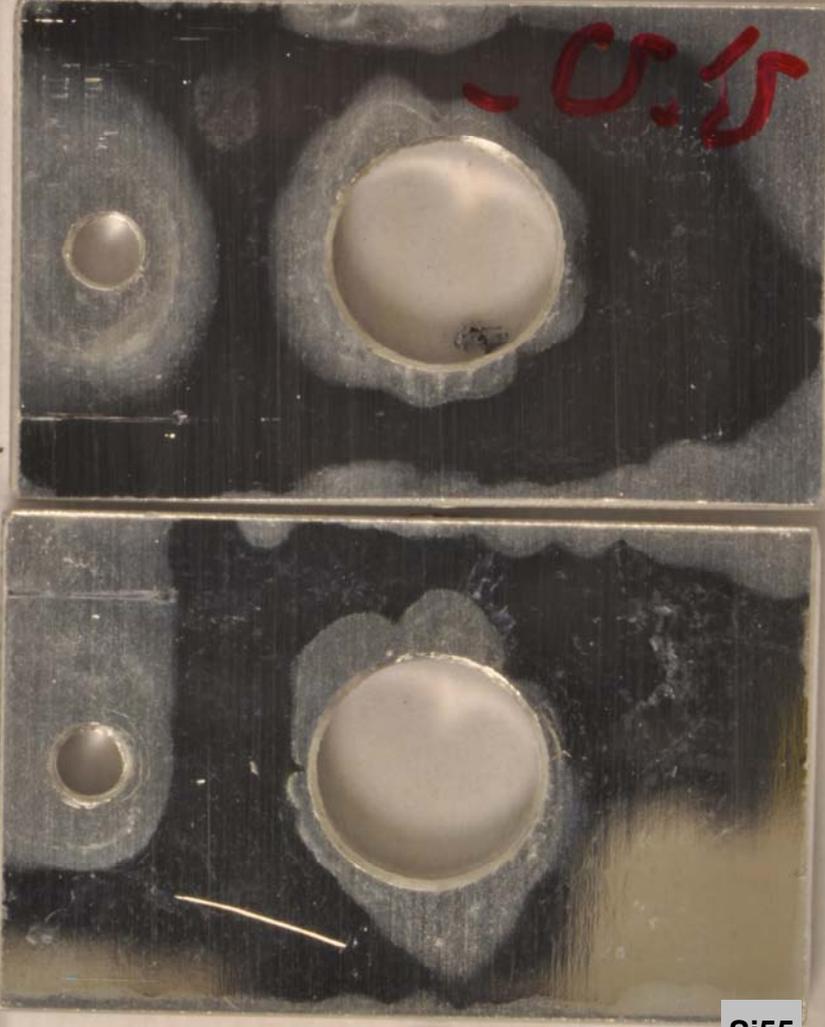
Volumetric heating: Aluminum vs. Silicon

Aluminium



Al57

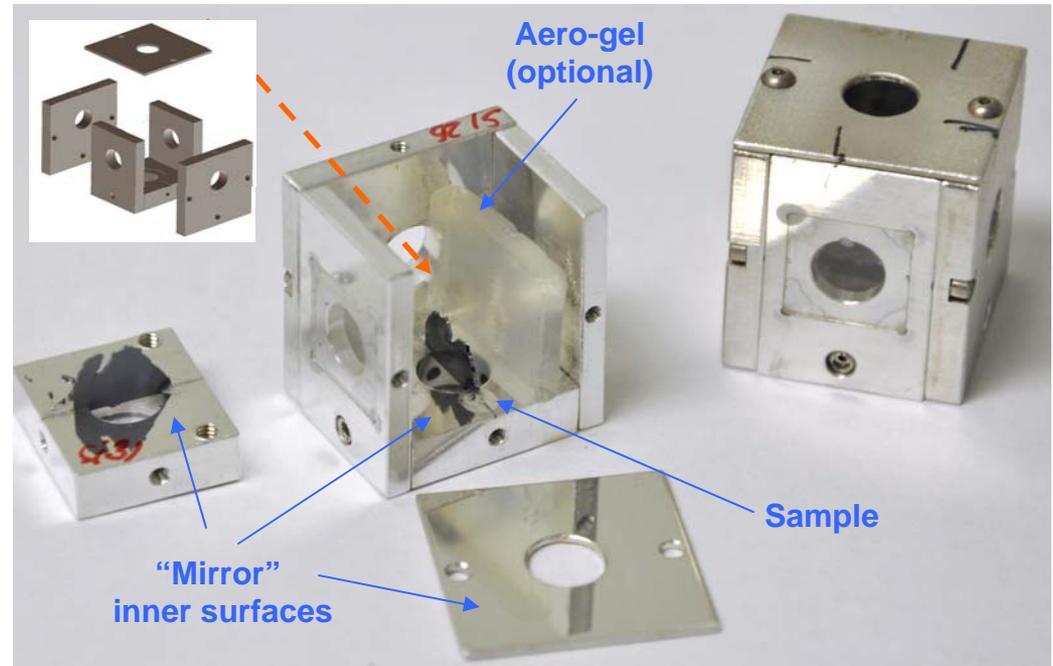
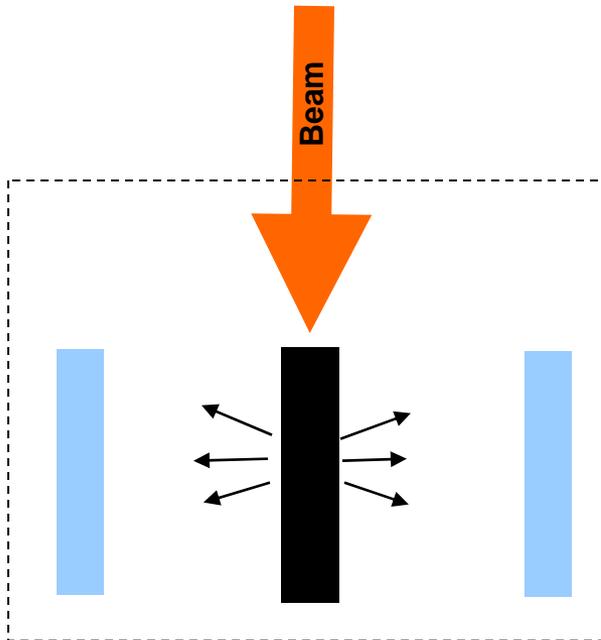
Silicon



Si55

Setup

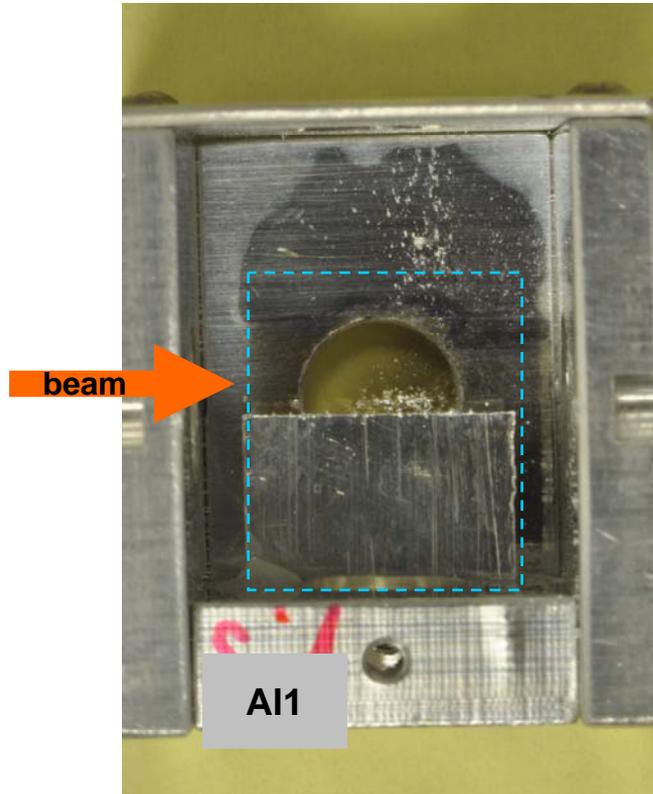
From SIS 18:
Uranium (+74), 83GeV/ion,
 $\sim 1 \times 10^9$ /bunch, FWHM = ~ 120 ns



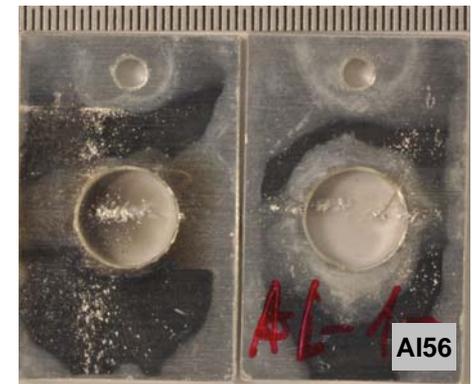
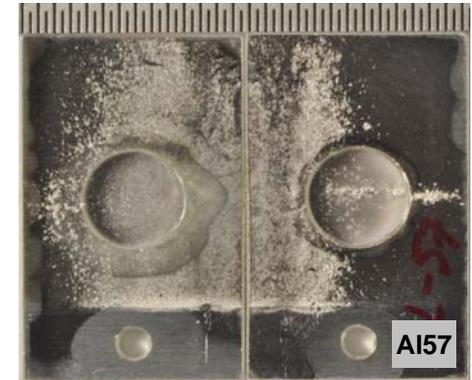
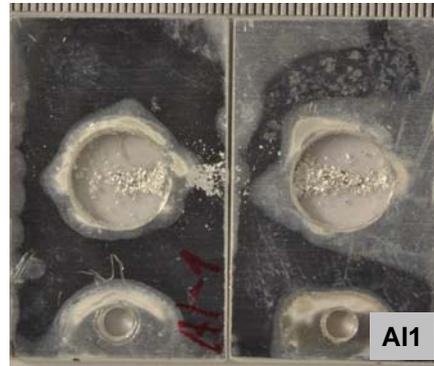
- Samples (Silicon or Aluminum) are enclosed in a casing that can be opened and disassembled for closer inspection
- In several experiments we had aero-gel installed

Aluminum produces intense burst of liquid shrapnel

View from the side
(side wall removed)



Side walls

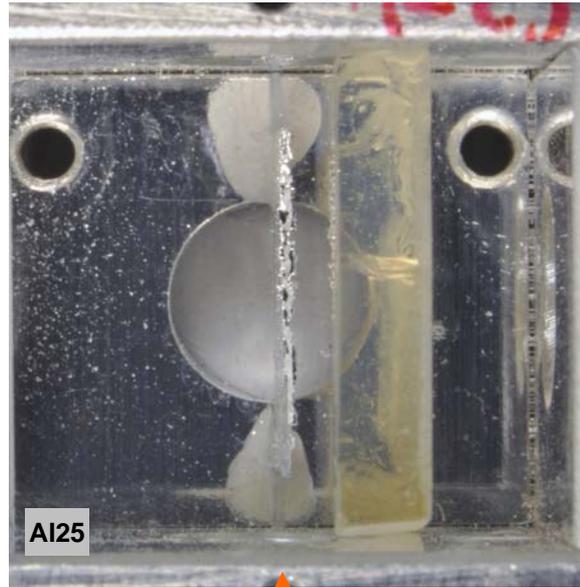


Aero-gel captured spray of Al particles

View from the side



View from the top

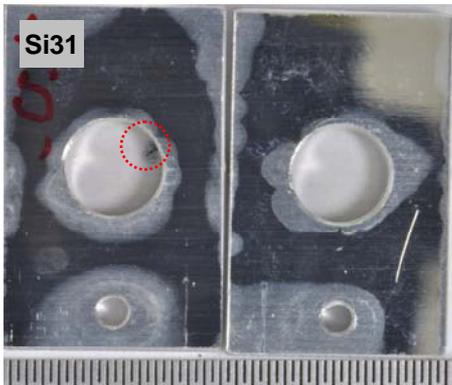


Aero-gel

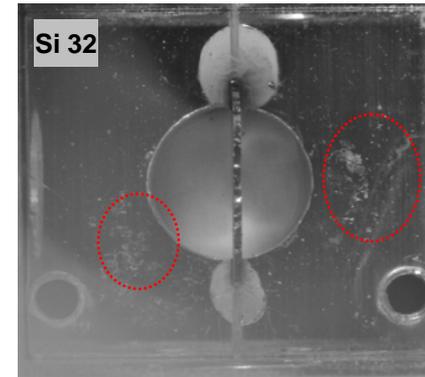
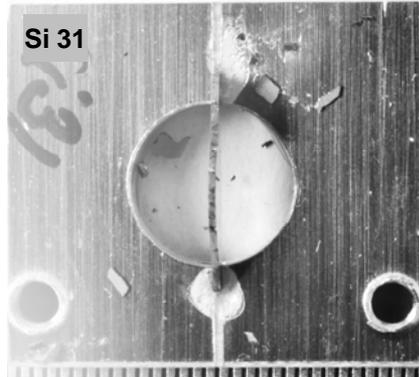


Silicon cracks and converts to dust: no liquid shrapnel!

Side walls



View from the top



Side views

