Coulomb Explosions I

Electric LENT III

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Nuclear Fusion Driven by Coulomb Explosions of Large Deuterium Clusters

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With two deuterons coming from different clusters, J. Zweiback et. al. observe the fusion reaction by detecting the neutron.

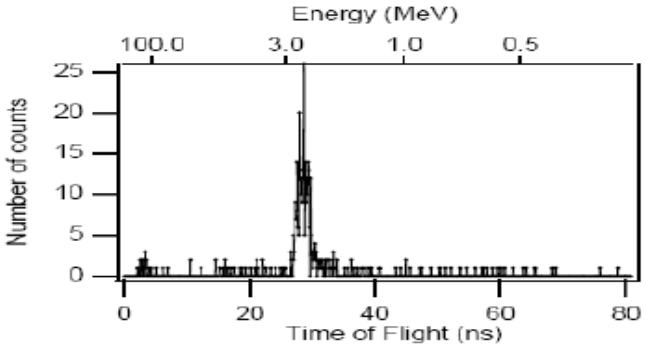
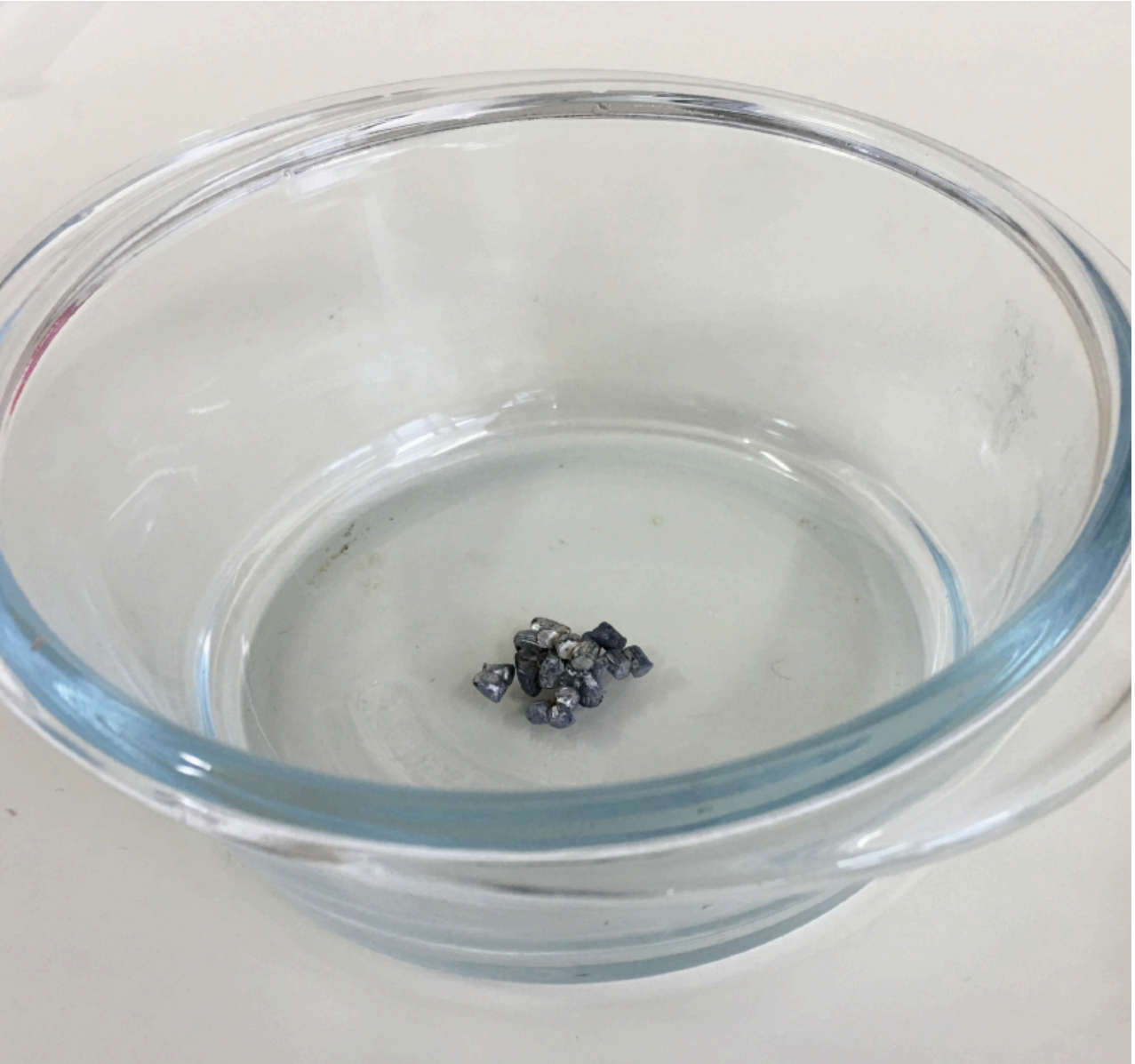


FIG. 1. Neutron time-of-flight spectrum. Neutrons were detected 62 cm from the target using a 7 mm thick plastic scintillator. The peak occurs at 2.45 ± 0.2 MeV, characteristic of DD fusion.

$$ {}^{2}_{1}H + {}^{2}_{1}H \rightarrow {}^{3}_{2}He + {}^{1}_{0}n $$

Coulomb Explosions II



Lithium crystals before melting

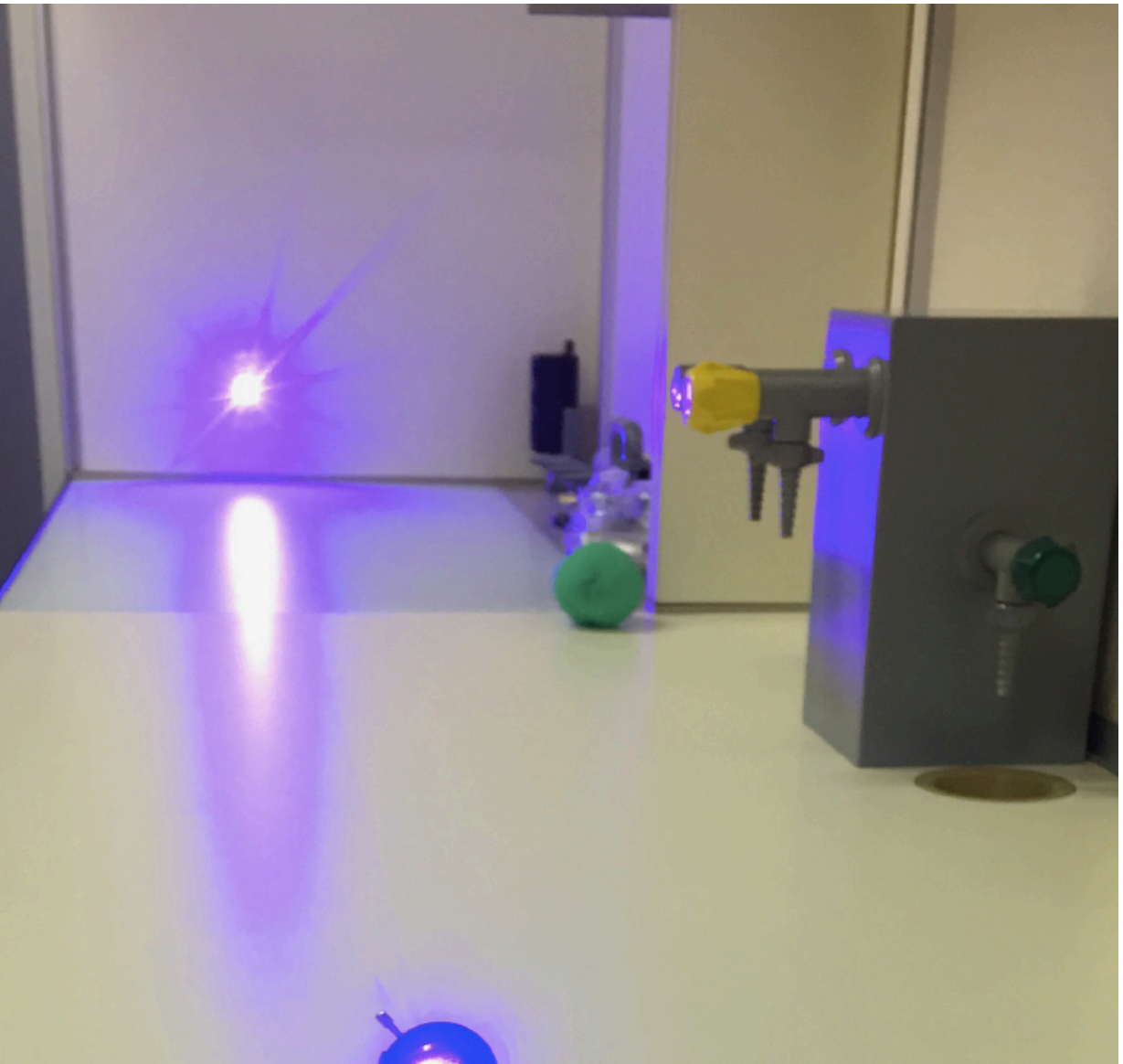
Coulomb Explosions III

Lithium Explosion after melt and cold water

Coulomb Explosions IV

Laser optical
Bench setup
I

Coulomb Explosions V



Laser optical Bench setup II

Coulomb Explosions VI

Microscope picture of Nickel powders after laser explosion

Coulomb Explosions VII

Microscope picture of Nickel powders after laser explosion

Coulomb Explosions VIII

Microscope picture of Nickel powders after laser explosion

Coulomb Explosions IX

Microscope picture of Nickel powders after laser explosion