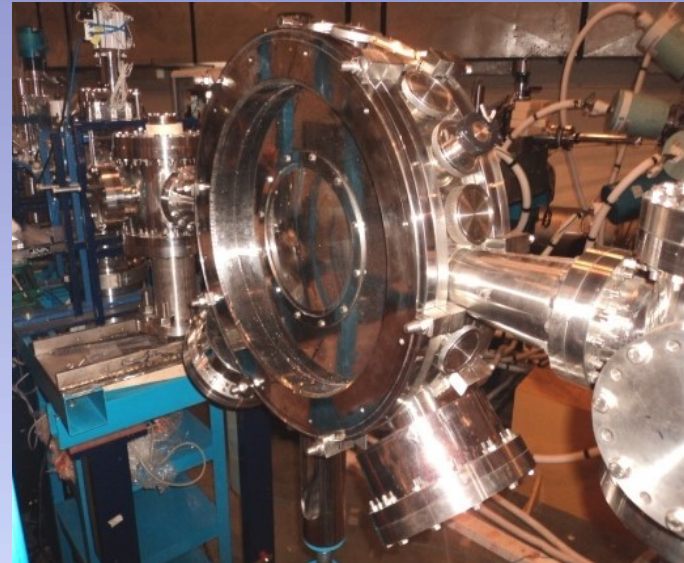
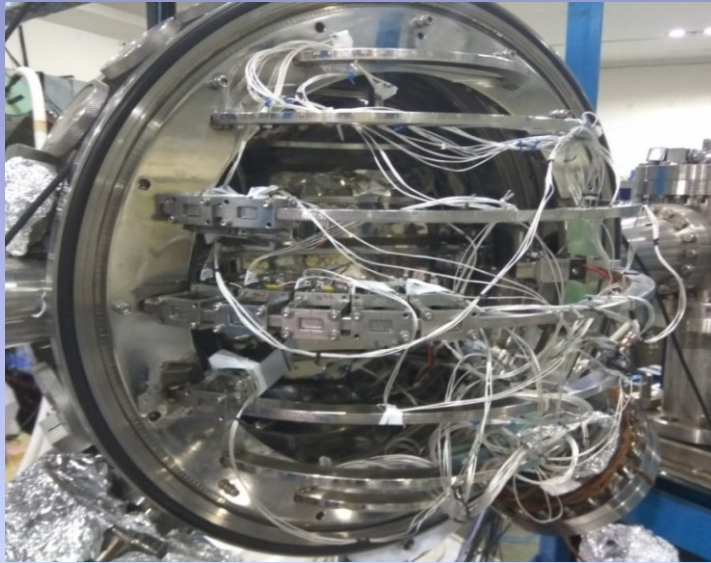


# Charged Particle Detector Array (PLF)



This array in Pelletron Linac Facility (PLF) is housed in a 60 cm diameter spherical high-vacuum target-chamber with side-opening hemispherical-lids or flat lids as per the requirement of the experiment. It consists of several tens of Si-CsI detector modules and other ancillary-detectors for investigations in nuclear structure at elevated temperatures and angular momenta, exotic nuclear clusters and related fields. High geometrical efficiency can be provided to an ancillary gamma detector array by allowing it to move close to target from the flat-lid side, although with some sacrifice of geometrical efficiency for the charged particles. Thinned portions of the lids also allow neutron coincidence measurements with charged particles and gamma rays.

For further details:

1. B. John et al., Nucl. Instr. Meth. A 609, 24 (2009)
2. B. John et al. Journal of Physics: C S 390(1), 012042 (2012)
3. G. K. Prajapati et al., Phys. Rev. C 102, 054605 (2020)