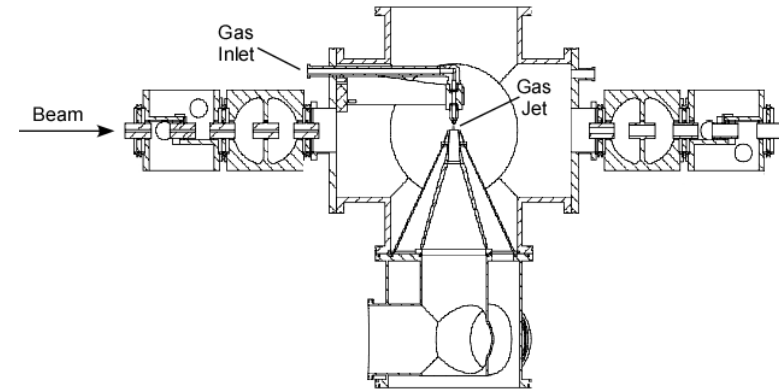


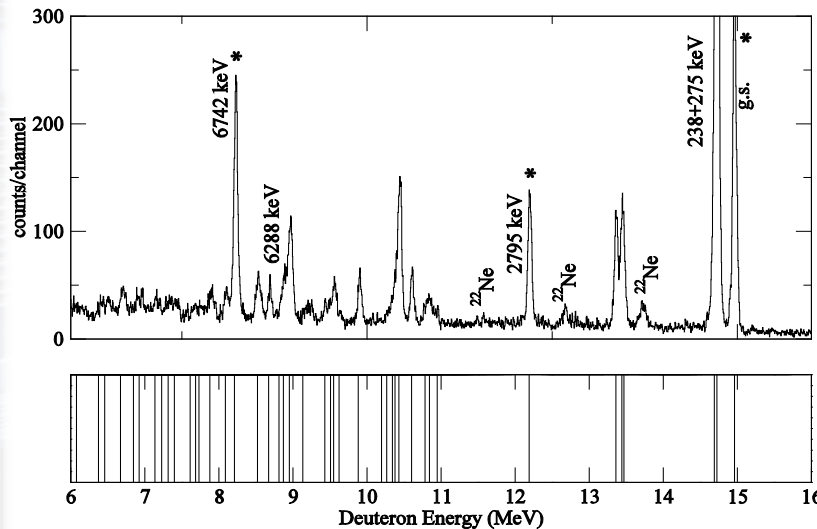
The First Science Result with the JENSA gas-jet target



The Jet Experiments in Nuclear Structure and Astrophysics (JENSA) gas-jet target holds the record for the highest density helium-jet target ever created. The target was used recently to study $^{18}\text{F}(p,\alpha)^{15}\text{O}$ resonances via a measurement of the $^{20}\text{Ne}(p,d)^{19}\text{Ne}$ reaction.



A schematic of the JENSA gas-jet target showing the gas-inlet at ~ 30 atm of pressure. The beam passes through multiple differentially-pumped apertures before bombarding the target.



A very clean spectrum of ^{19}Ne states was observed allowing for the confirmation of a strong subthreshold $^{18}\text{F}(p,\alpha)^{15}\text{O}$ resonance. The bottom panel shows the expected energies, which agree well with the data. JENSA has now been installed at NSCL for radioactive beam experiments.

