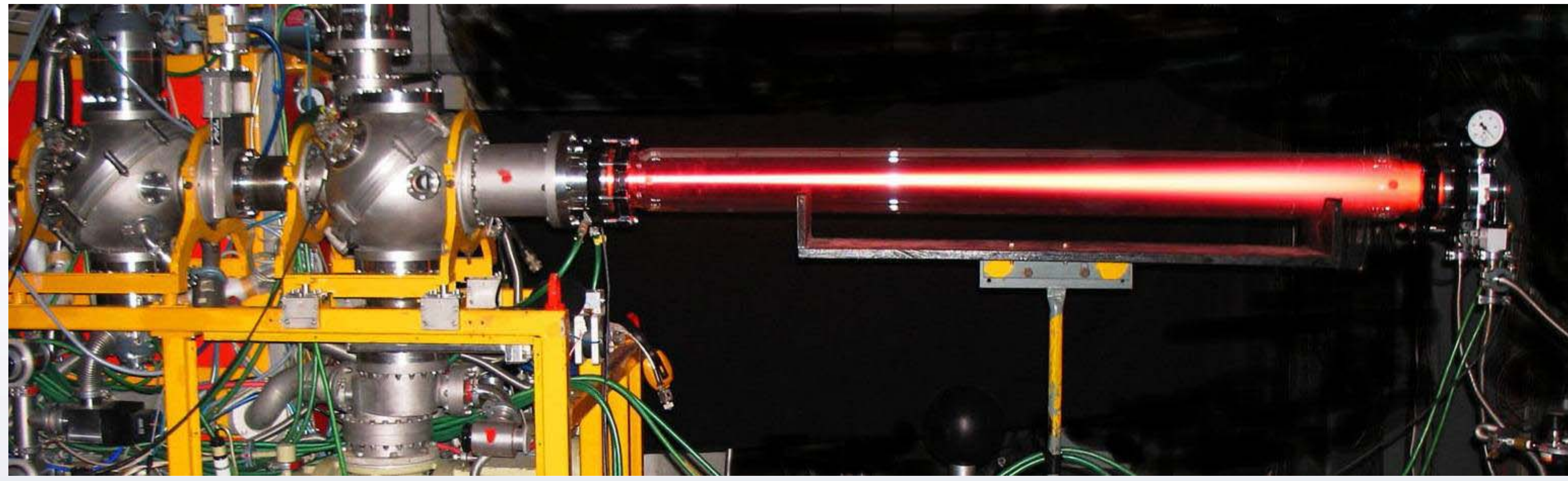


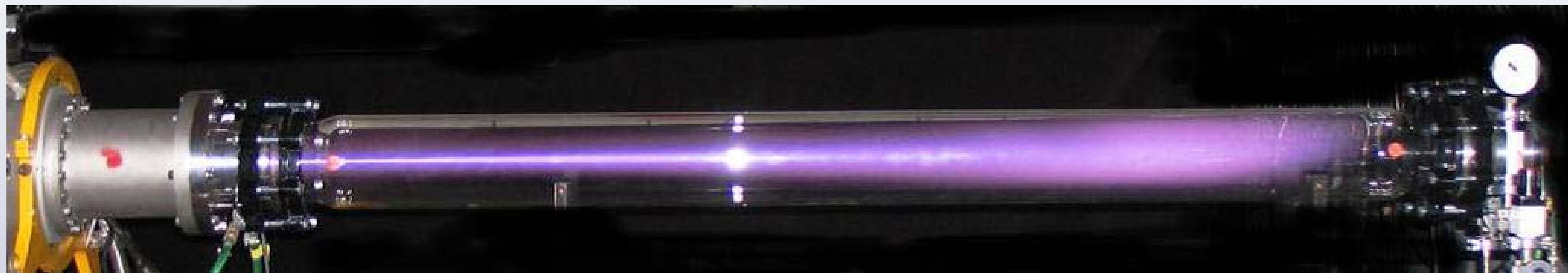
# Notre Dame Gas Targets

E. Stech, H. Costantini, M. Couder, J. Görres, W. Hammer, P.J. LeBlanc and M. Wiescher  
University of Notre Dame

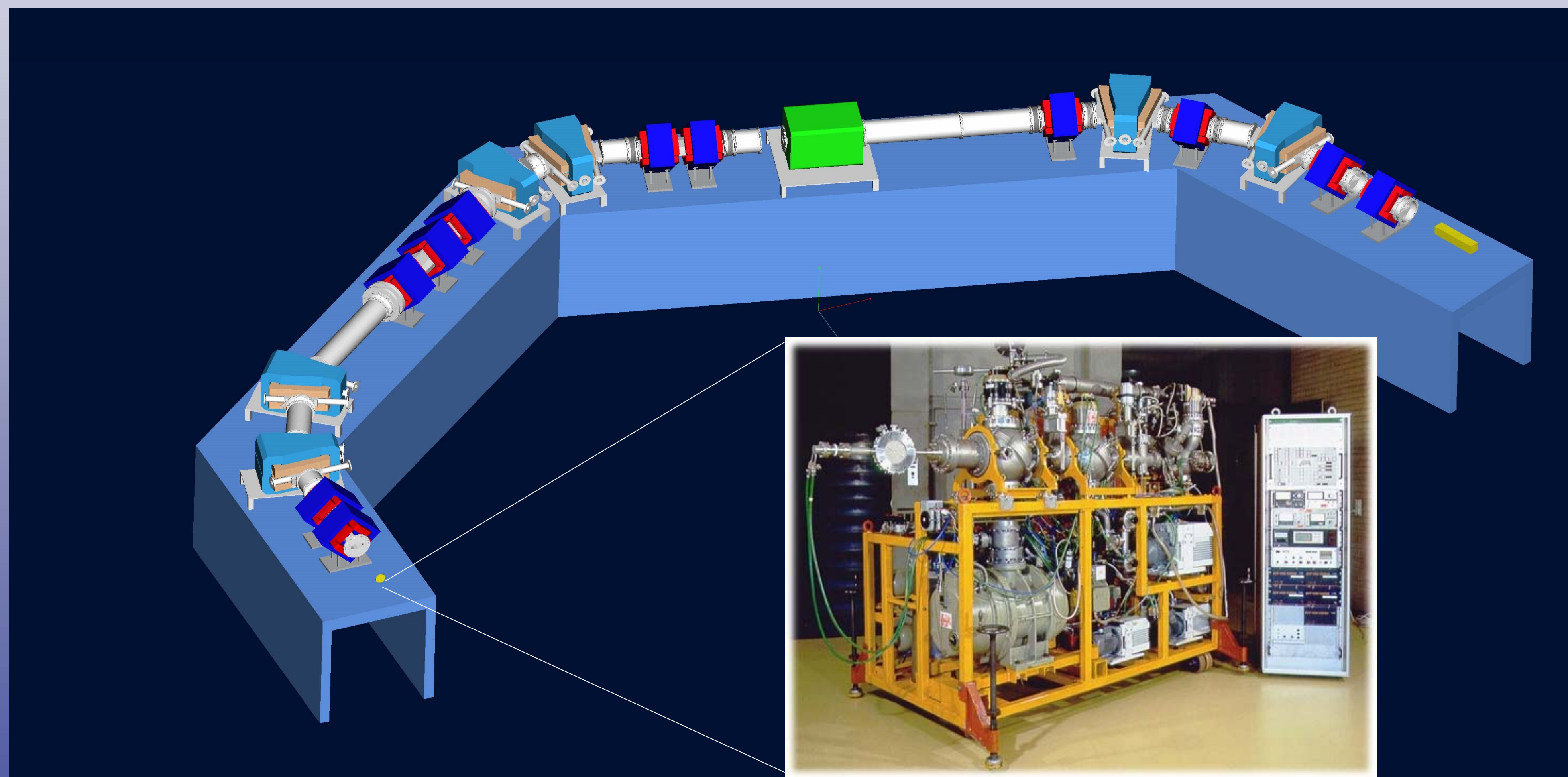


The windowless gas target known as RHINOCEROS has recently been installed in the KN/JN Target Room in the NSL.

Initial beam tests have been completed as shown to the left.



The first experiment at ND using the target is planned for this summer and will be  $^{22}\text{Ne}(\alpha, \gamma)^{26}\text{Mg}$  using  $\alpha$  beams from both the KN and JN accelerators and a pair of Ge clover detectors.



The target for the Recoil Mass Separator will be a windowless gas jet target followed by a second Argon jet to improve the charge state distribution of the recoils.



A smaller gas target system displaced by the installation of RHINO has been simplified and will be used for PIXE applications with the KN accelerator including JINA's PIXE-PAN summer program.