

Neutrino Factory Mercury Catcher Concept

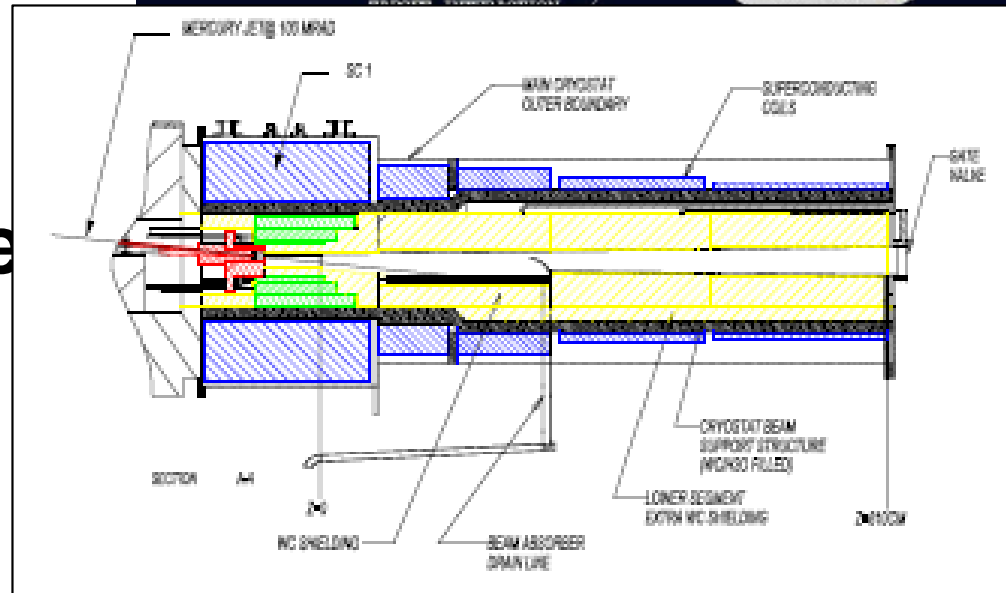
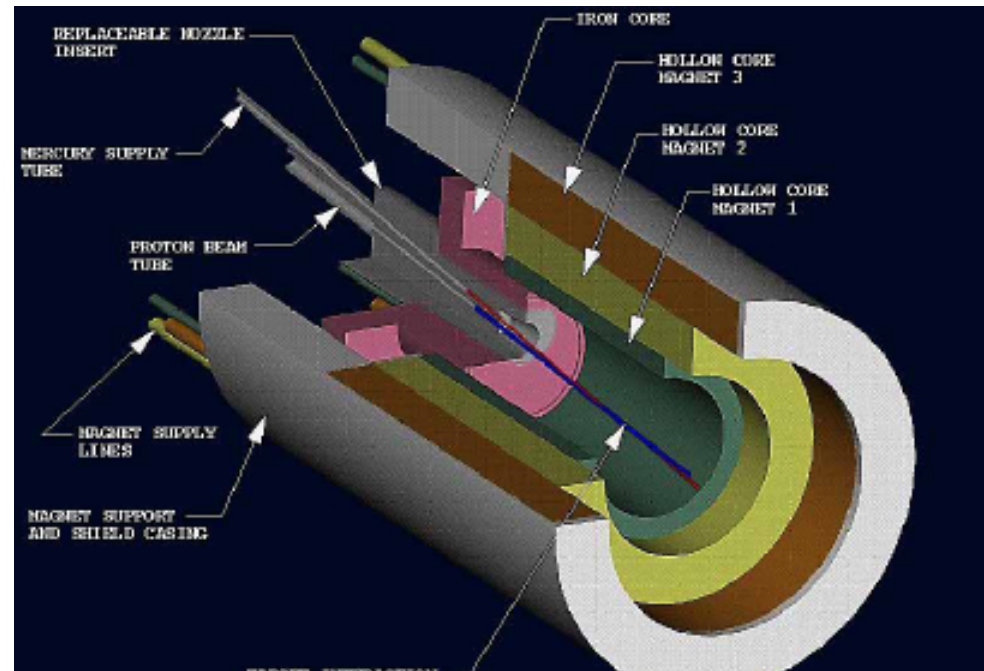


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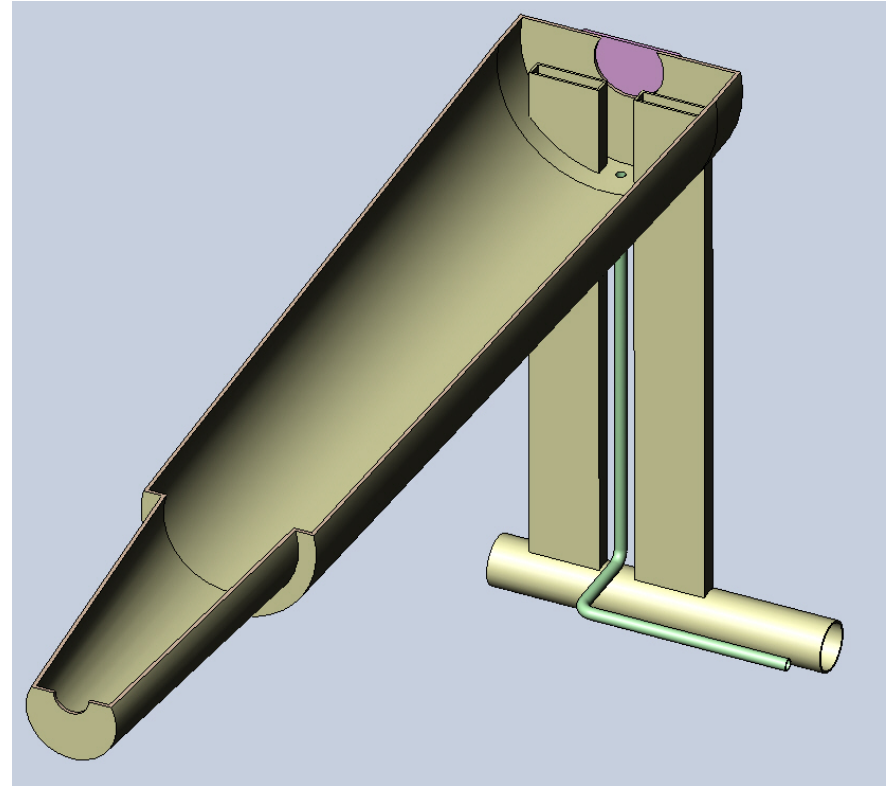
Study 2 Target Region Layout

- **General concept, not very detailed with regards to jet containment**
- **Primarily an engineering issue, but splash mitigation and draining will require further R&D**



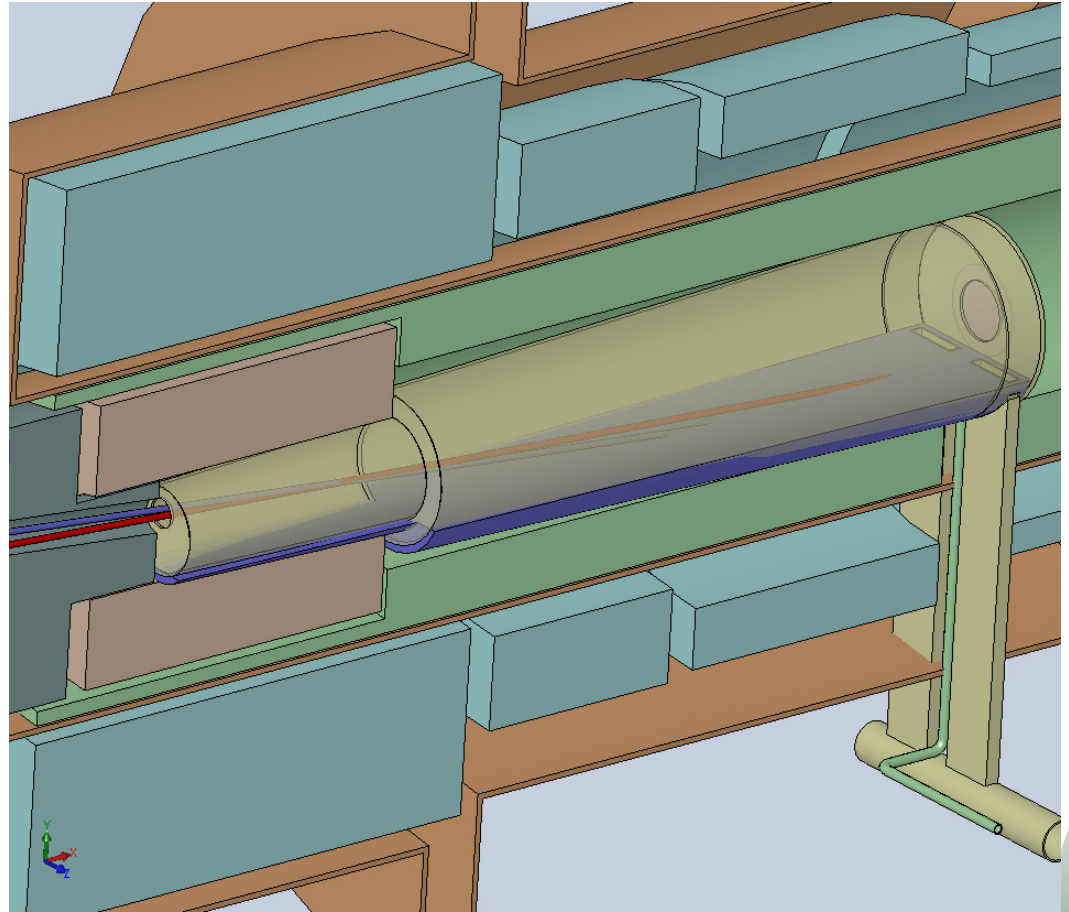
Conceptual Design for a Mercury Catch Basin

- **Primary fluid exit during operations is through overflow piping**
 - Provides pool of Hg for splash mitigation and beam dump
- **Drain after shutdown through separately valved pipe**



Catch Basin in Main Cryostat

- **Many assembly and maintenance issues exist and require further thought**
- **This concept developed to foster discussion and to let others see potential operational and fabrication issues**



eDrawings

- **eDrawing files allow creation of 3D geometry files that can be viewed on computers that don't have the actual modeling software installed**
- **Requires a eDrawings Viewer from SolidWorks**
 - http://www.solidworks.com/pages/products/edrawings/eDrawings.html?lsrc=quick_links