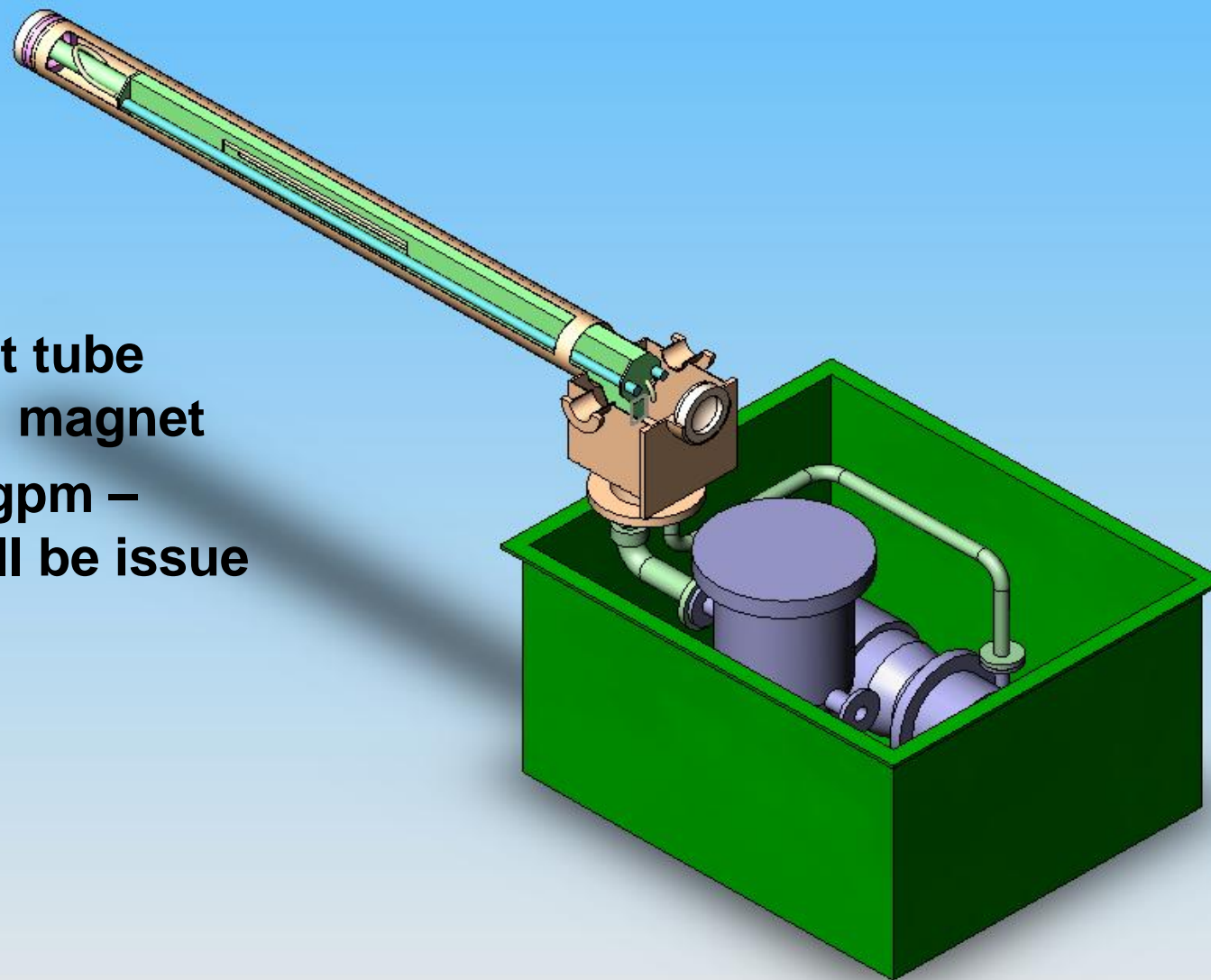


Tilt Option Discussion Issues

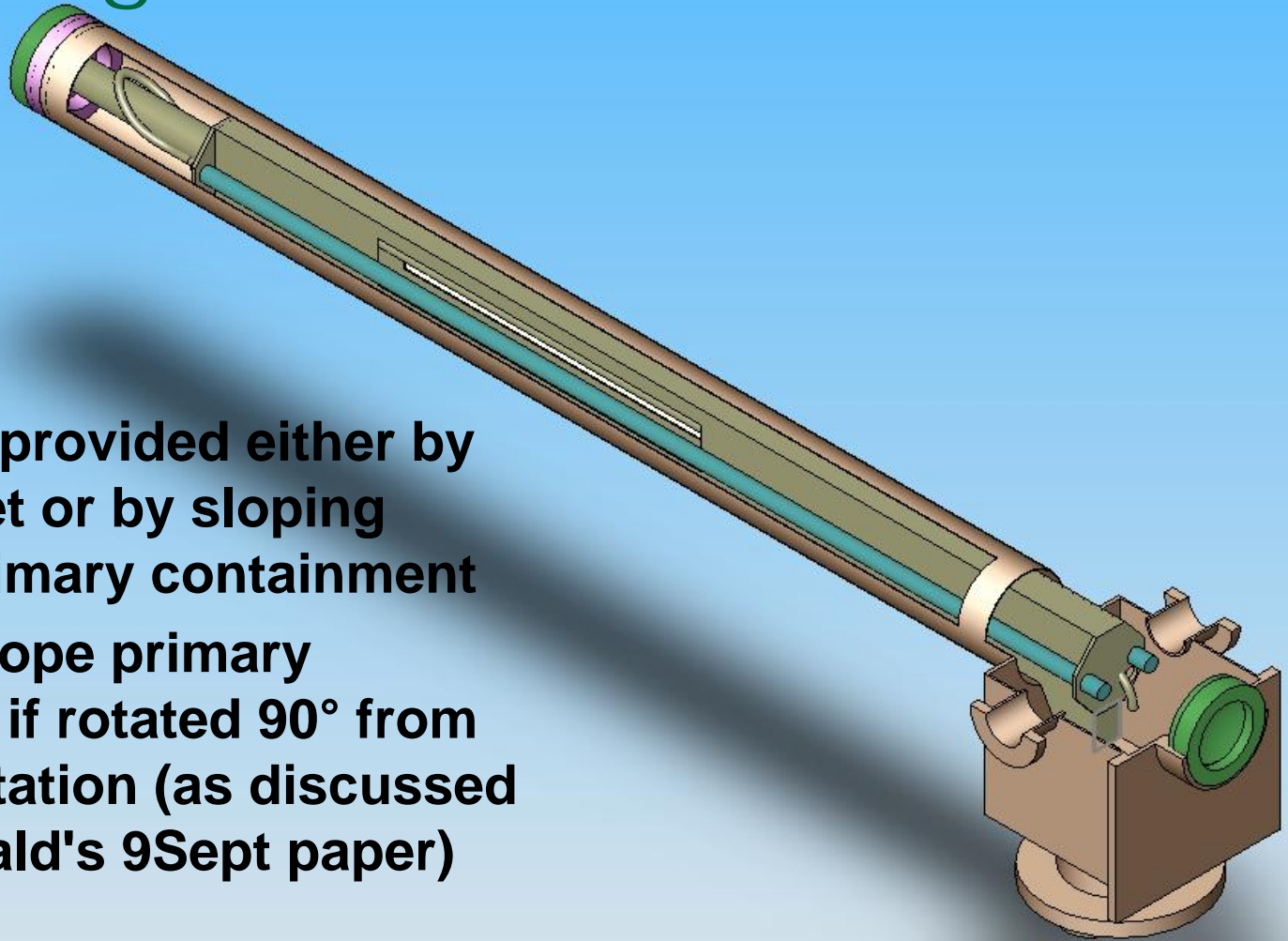
Van Graves
Phone Conference
Sept 22, 2004

Reminders

- **Secondary containment tube coaxial with magnet**
- **Hg flow 25 gpm – drainage will be issue**



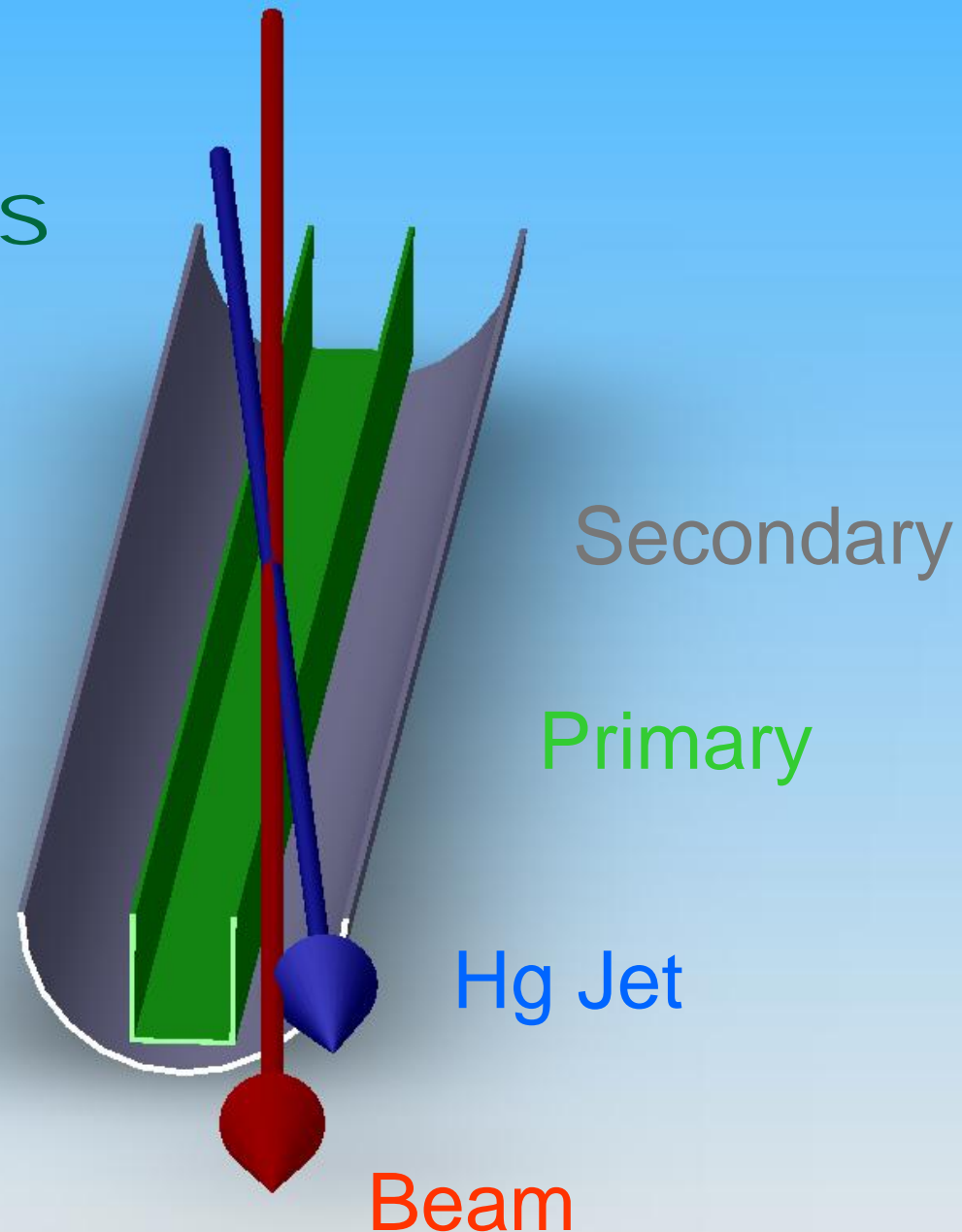
Hg Drainage



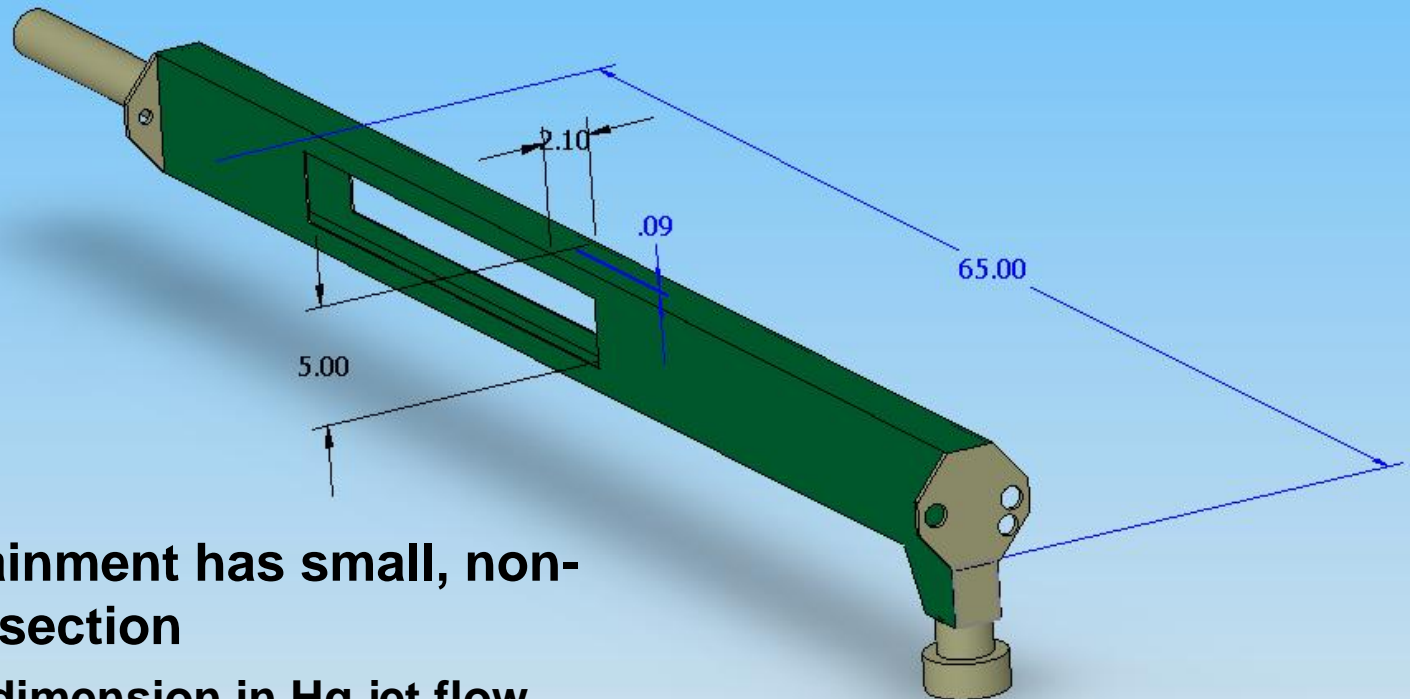
- Hg drainage provided either by tilting magnet or by sloping bottom of primary containment
- Difficult to slope primary containment if rotated 90° from shown orientation (as discussed in K. McDonald's 9Sept paper)

Option 4 Issues

- In Option 4 Hg jet cannot enter primary containment at the end
- Difficult to rotate primary containment about vertical axis to match Hg jet flow plane
- Hg jet entering from side as shown would affect optical path
- Hg jet flow plane should contain magnet axis



Primary Containment Constraints



- **Primary containment has small, non-square cross section**
 - Want long dimension in Hg jet flow plane
- **Rotating about beam axis may cause drainage and optics problems**

Possible Alternative

- Hg jet & magnet axis in vertical plane
- Magnet rotated about vertical line
- Magnet tilted for Hg drainage

