## Recent Work on Target Development

Dannie Steski, Frank, Oleg, Prashanth, ...

## Commercial wires as Targets

- We ordered W (4 μm) and Ag coated Pt (0.6μm) wires through CAD
- CAD paid for the wires.
- Dannie is working on mounting the wires to holders:
  - Essentially all work done by Dannie, quite a steep learning curve with new materials
  - Everybody else is watching and learning how he does the things
  - Five 4 µm W-targets ready to be mounted
  - Pt wires were successfully glued to the target holders
    - But etching with  $HNO_3$  (75%) breaks the 0.6 µm wire
      - Stress on Pt wire seems too large when Ag coating is removed or etching procedure is adding stress
      - Dannie is trying different methods
      - 4 µm Pt wires without Ag coating has been ordered, in case we don't succeed with 0.6 µm Pt wire
- Expect to mount targets and detectors at polarimeter in early March
  - Six weeks available for pump down before run start
  - Goal: mount up to 8 W & Pt targets at the polarimeter, one on each target holder



0.6 µm Pt (coated with Ag)



 $4\,\mu m\,W$ 



Ag epoxy to complete the electrical loop



Epoxy to glue to mount wire to the target holder





Mounting the wire to holder (W)

## Work at CFN

- Working at CFN is basically dead for last 2.5 months
  - Due to equipment failure (Lesker contacts evaporator)
- Personally, don't have much hope
  - Due to unreliability of equipment
  - Short-staffed, not much help
  - Methods provides very low yield compared to commercially available wires