

SUMMARY AND PLANS

NEW IDEAS

Use Gas Electron Multipliers (GEM) instead of scintillators?

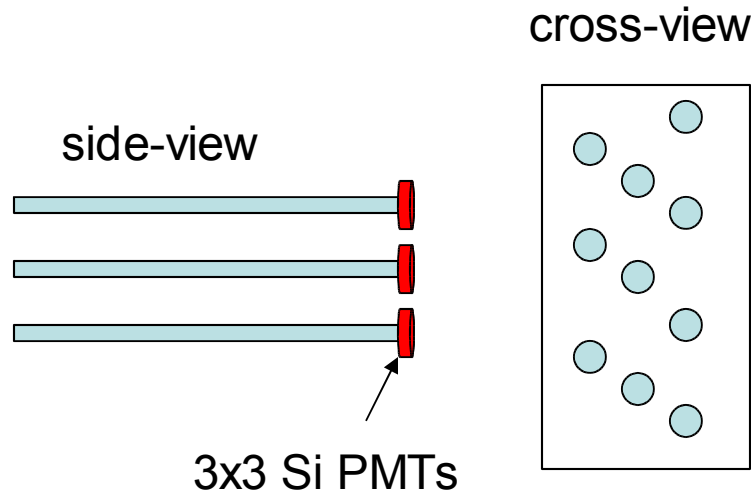
Advantages

(Perhaps Howard can comment more on this)

- ✓ Better resolution
- ✓ Thinner (less material) therefore less background from knock-ons

Design options : Two options

1ST OPTION : Attach PMTs at the end of each rod



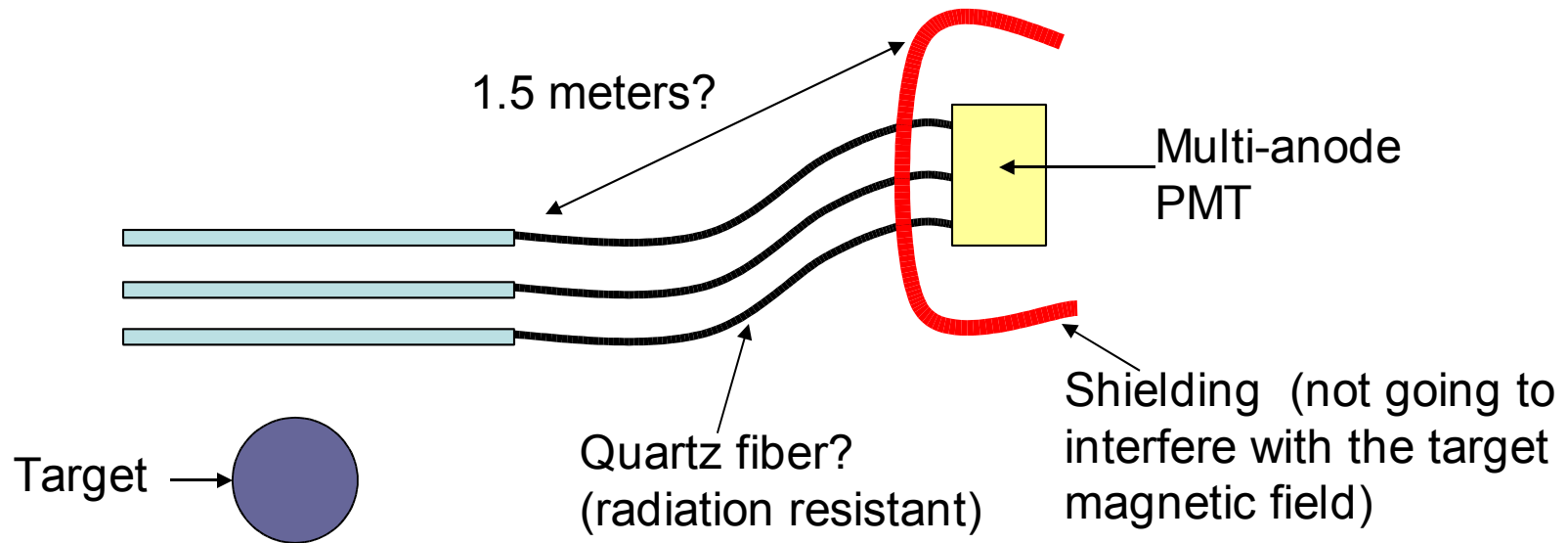
Disadvantages

- ✓ Going to need more layers to get better resolution (no space to stack them because of PMTs)
- ✓ Potential rate limitations

Advantages

- ✓ Potentially cheaper
- ✓ No cross-talk

2ND OPTION



Disadvantages

- ✓ Cross-talk
- ✓ Fiber is not cheap

Advantages

- ✓ Technology much less risky (Has been used for nearly 10 years)

Time line : Should be ready by next summer