

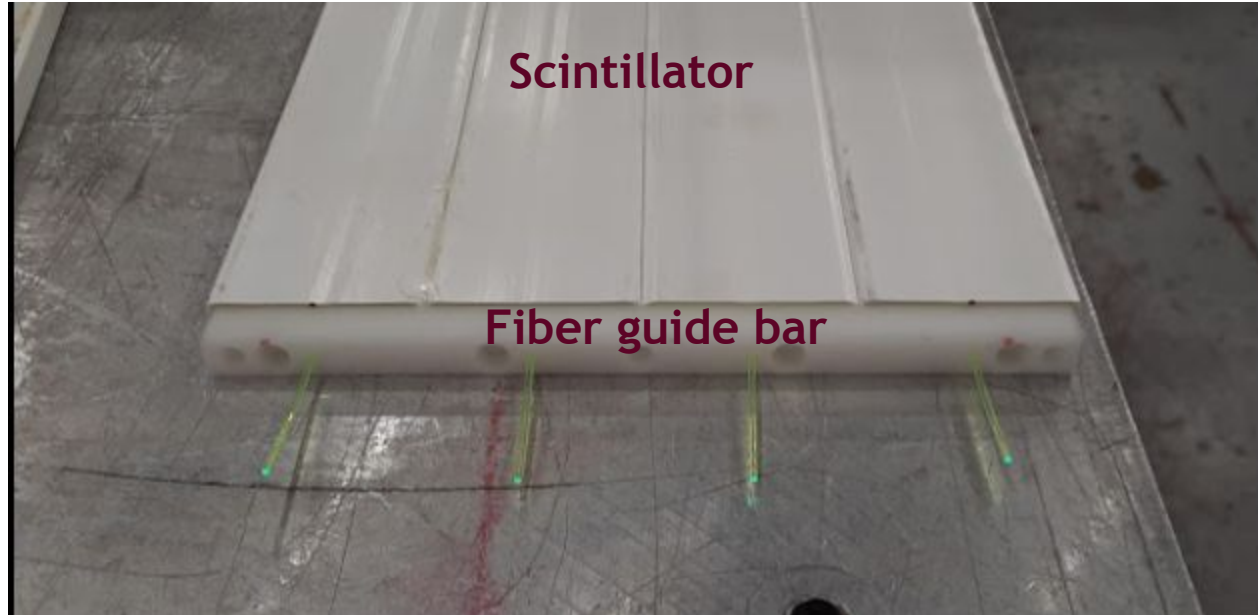
# TMS Detector Prototyping Update

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1. Short (0.5m) mechanical-prototype quad-counter scintillators glued, and end parts (some real and some dummy) fabricated
2. Next will be full-length (3m) quad counter



# TMS Mechanical Prototype Short (0.5m) Quad Counter



# TMS Mechanical Prototype Short (0.5m) Quad Counter



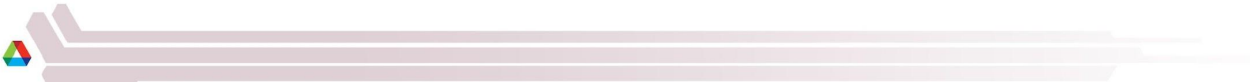
**4-SiPM Fiber-Mating-Bar**



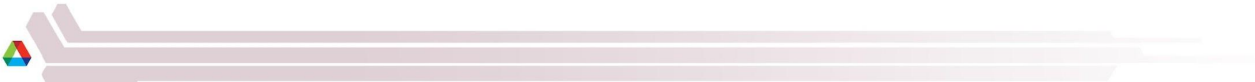
**Dummy PC Board**



**4-SiPM Fiber-Mating-Bar with  
1 3D printed mockup of SiPM+carrier**



Previous slides...



# TMS Detector Parts Update

## Scintillator review:

1. 36 new strips, 40mm x 10mm x 3m, with Mu2e-like ~2x4mm hole in middle (~\$5K mostly setup)
2. 103 Minos strips, 41mm x 10mm x 4m, with 1.2mm grooves.
3. 58 T2K strips, 40mm x 10mm x 1.5m, with 2008 attempt at hole
4. **We want TMS strips 35.4mm x 10mm x 3m. New size die for extrusions ~\$29K in setup costs. Going with 40mm wide prototypes for now to minimize setup charge.**

## Fiber review:

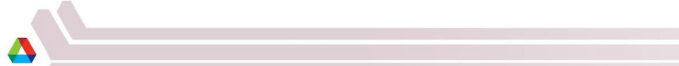
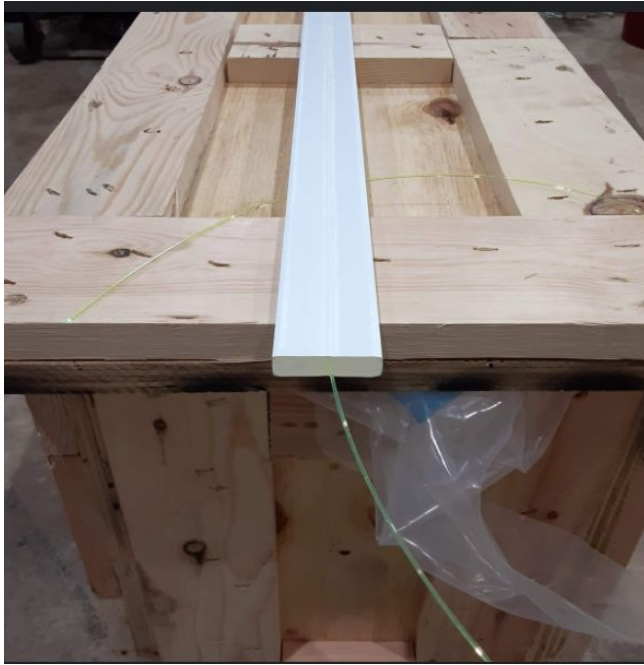
1. 255m of 1.4mm diameter Kuraray WLS fiber: Y-11(175) multi-clad (K27 dopant) (~\$3K min order)
2. 5m of scrap 1.2mm Kuraray fiber from 1999

## SiPM review:

1. 12 Hamamatsu S14160-3015PS MPPCs delivered to ANL, 8 at ANL, 4 at Tufts (~\$500)



# Scintillator



# Fiber

