

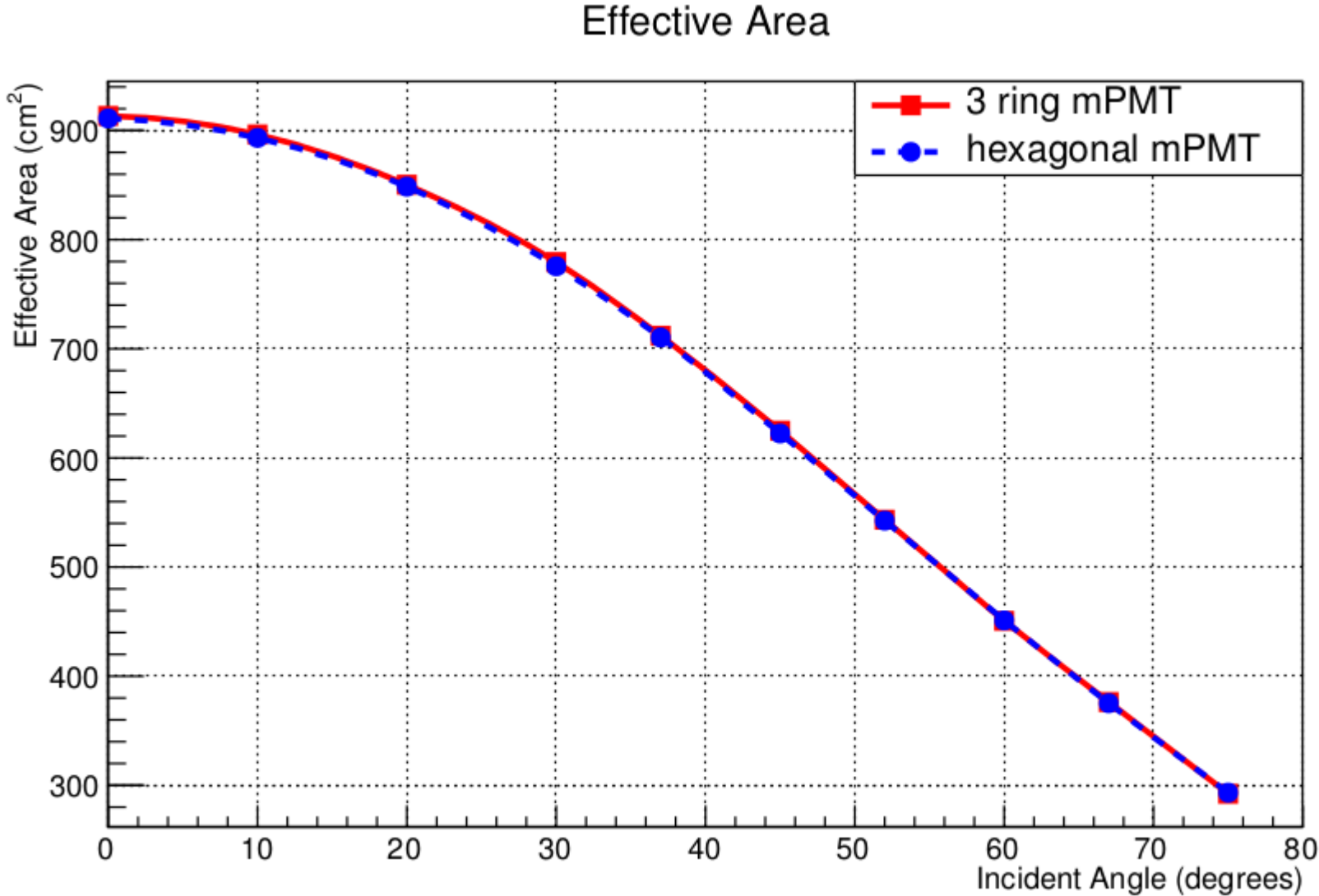
# Progress Update

Trevor Towstego  
UofT Neutrino/DM Meeting  
April 20, 2017

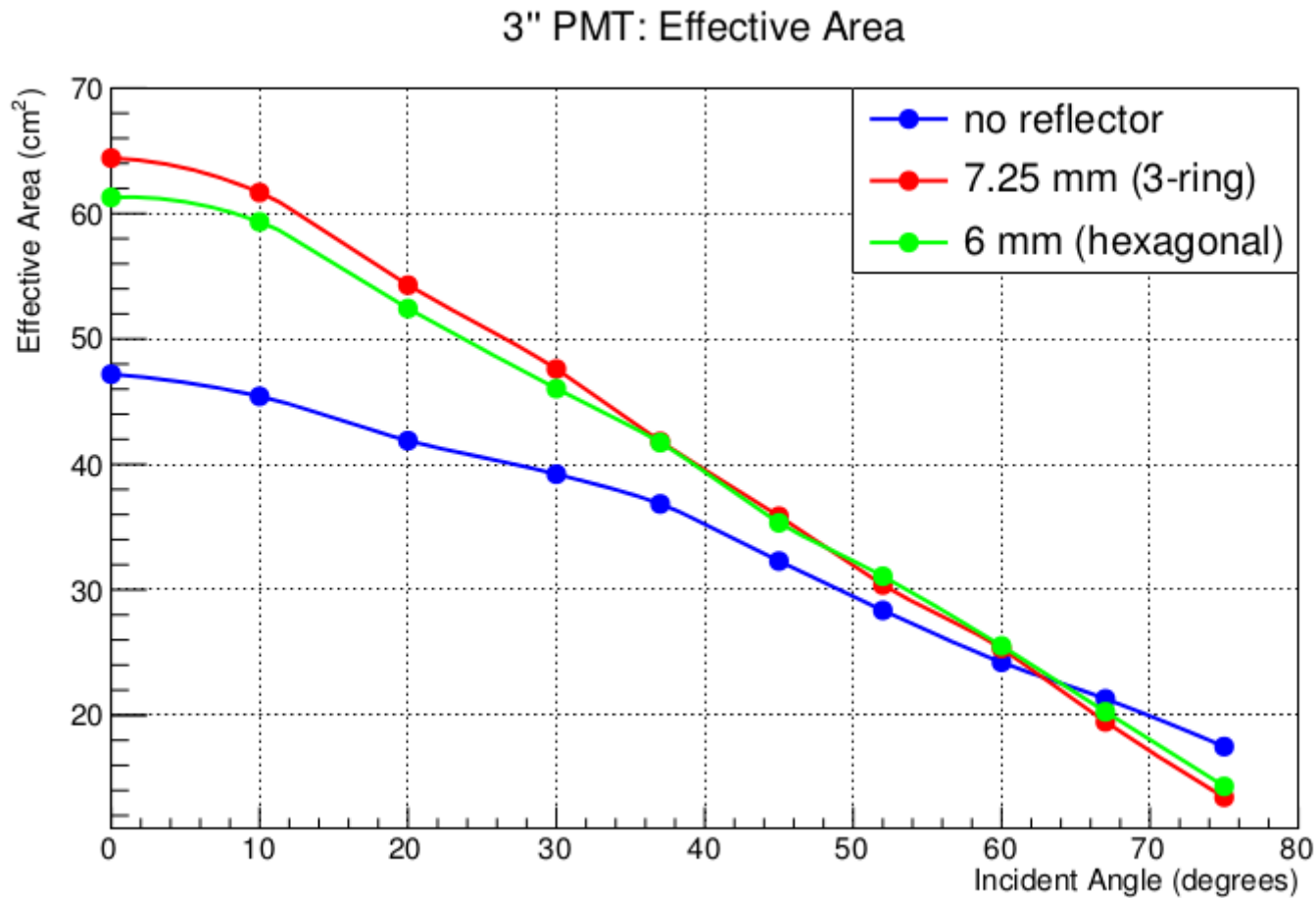
# Aluminum Pipe

- TTG Star
  - 6063 T5 aluminum
  - \$195.20 / module
  - OD +/- 6.5 mm
- Shanghai YingGui Metal Product
  - 6061 aluminum, mill finish
  - \$185.46 / module
  - OD +/- 2 mm
- Modern International Trade
  - 1060 aluminum
  - \$125.10 / module
  - OD +/- 0.5 mm
  - 6061 aluminum
  - \$274.44 / module
  - OD +/- 0.5 mm
  - 1 m pieces
- A different company didn't give a quote, but said 5XXX or 7XXX might be better for us
  - 5083 often used in marine environments
    - resists corrosion
  - 7XXX used in aircraft industry
  - 6XXX used in automobile production
  - 1XXX most pure
- Still need to ask about samples
  - could we get any samples from different sources as long as they're the right alloy?

# Direct Comparison (with reflectors)



# 3" PMT Comparison



Now working on macro for  $\theta$ - $\phi$  simulations  
(just moving around circular source)

# Optical Setup

- Order:
  - Hamamatsu S1227-33BQ photodiodes (x2)
  - Newport UVBS14-1 beamsplitter
- Last week mentioned using CMOS camera to observe beam profile
  - issues with sensitivity in UV
  - fluorescent plate instead? **Highlighter**???
- Spoke to Galina (PCS) about getting a Windows desktop so we can use LabVIEW
  - she has one for us, just needs to clear the harddrive

# Ph.D. Qualifying Exam

- Best dates for committee seem to be June 12 or 13
- Will contact convener (Prof. John Wei) to see if these work

# Travel

- Shifts
  - Leave: Wednesday, April 26
  - Return: Tuesday, May 9
- Collaboration Meetings
  - Leave: Saturday May 20
  - Return: Sunday June 4
- Possibly: Machine Learning School in Reading, UK
  - July 16 – 23
  - should read up on machine learning (found the book Hiro recommended online), refresh Python memory before going