



# Progressing the muon instrumentation in ISIS & CSNS

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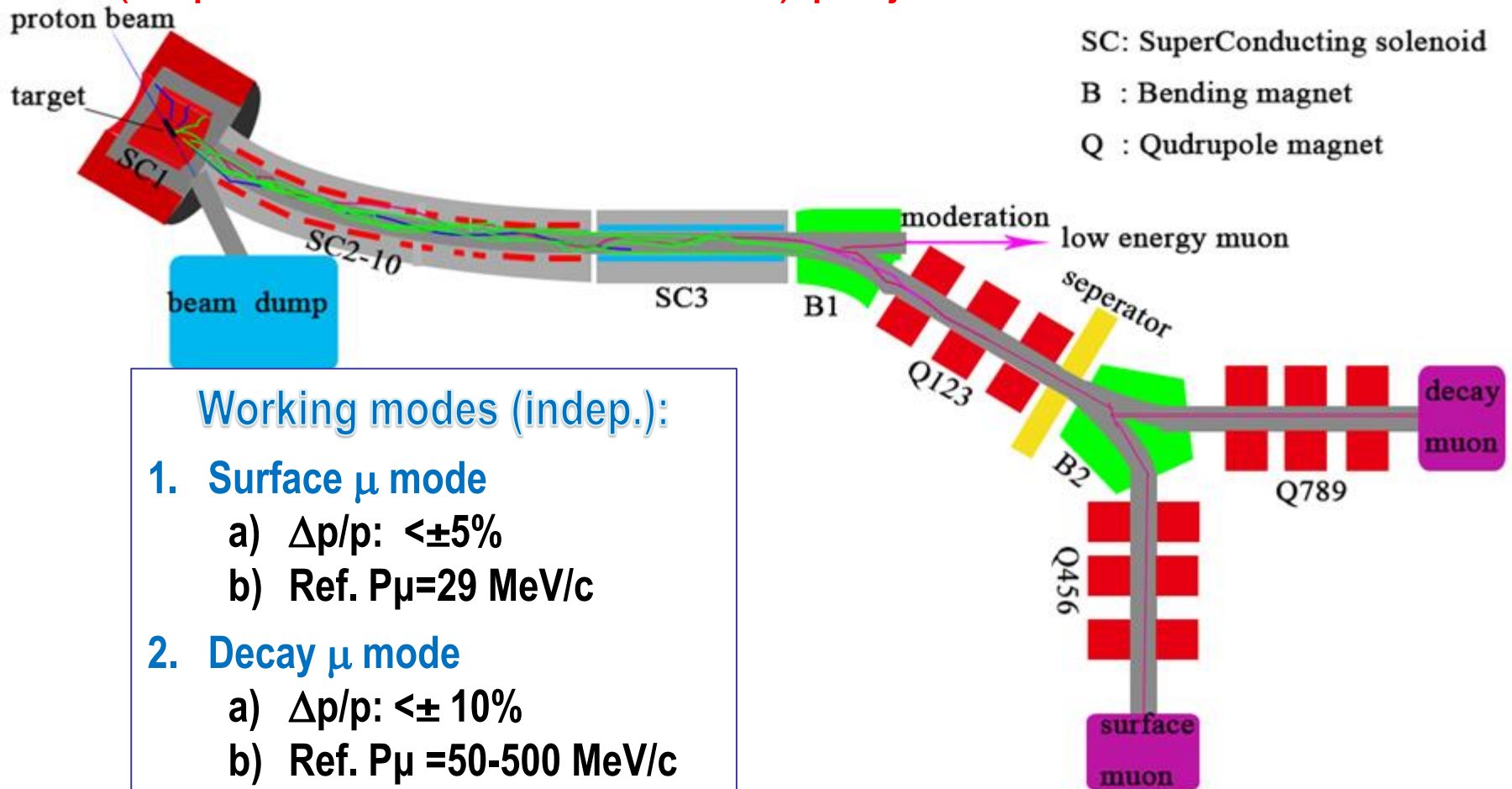
# Outline

- *Designing and testing the first Chinese MuSR spectrometer*
- *Building and Testing SiPM-based EMU detector*
- *Life in UK*



# 1 Designing and testing the first Chinese MuSR spectrometer

EMuS (Experimental Muon Source) project in CSNS:



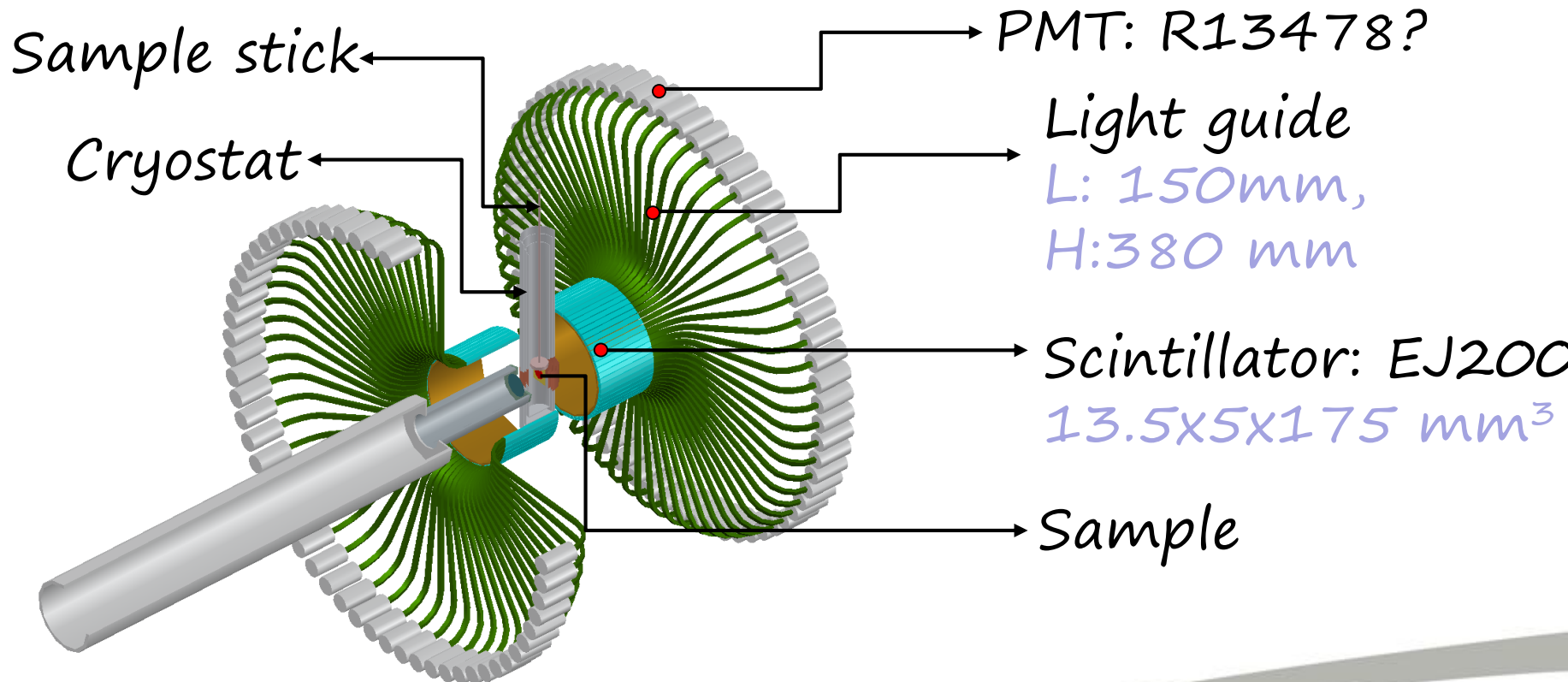
Working modes (indep.):

1. **Surface  $\mu$  mode**
  - a)  $\Delta p/p$ :  $< \pm 5\%$
  - b) Ref.  $P_\mu = 29 \text{ MeV}/c$
2. **Decay  $\mu$  mode**
  - a)  $\Delta p/p$ :  $< \pm 10\%$
  - b) Ref.  $P_\mu = 50\text{-}500 \text{ MeV}/c$
3. **Neutrino mode (optional)**
  - a) Wide momentum range
  - b) Ref.  $P_\pi = 300\text{-}500 \text{ MeV}/c$



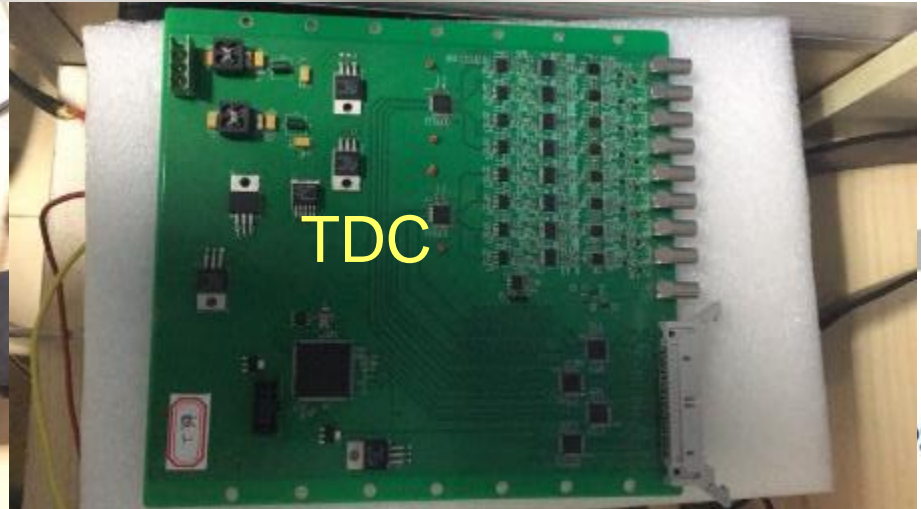
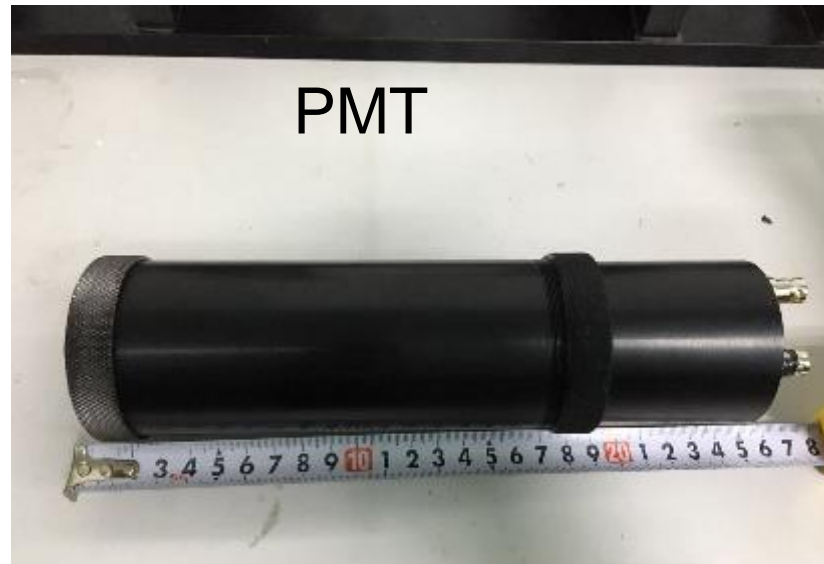
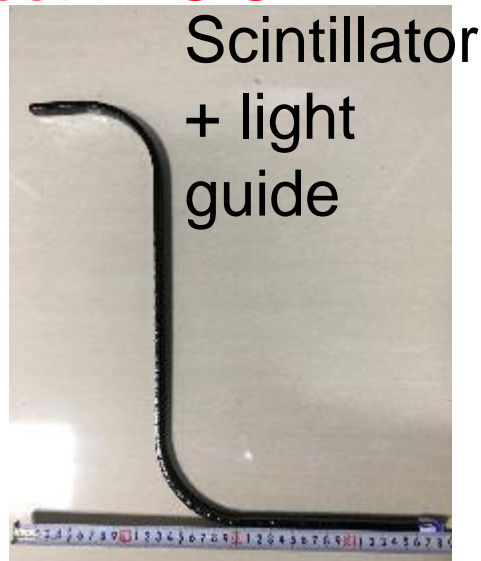
# 1 Designing and testing the first Chinese MuSR spectrometer

Whole model:



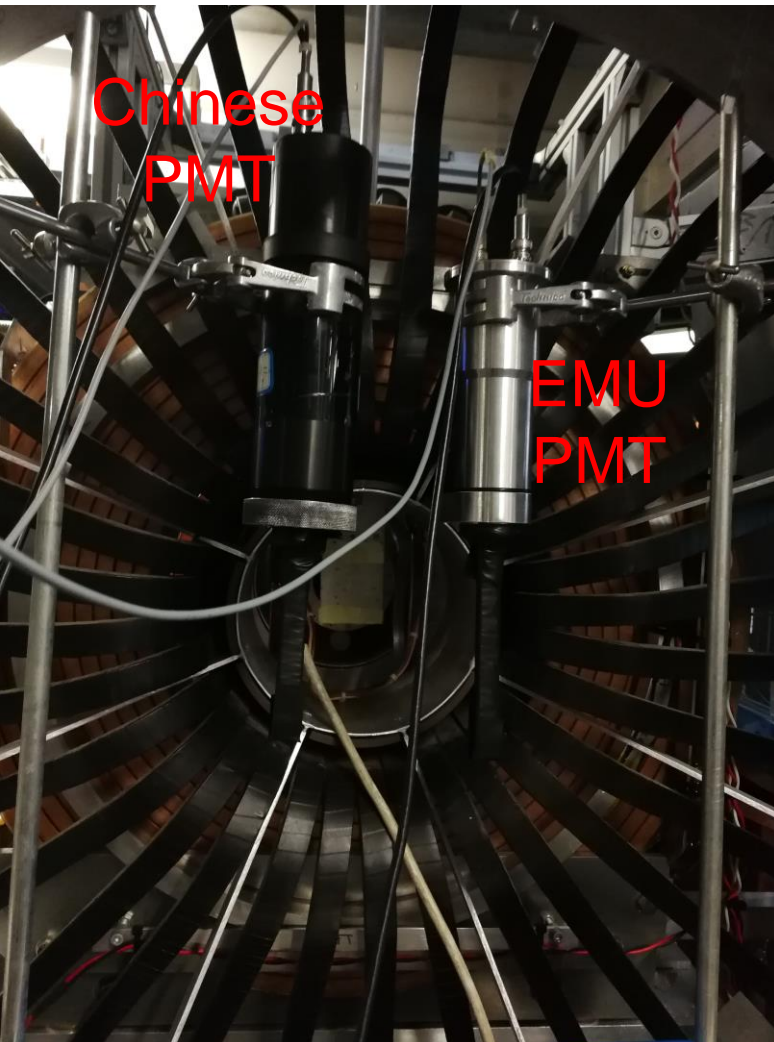
# 1 Designing and testing the first Chinese MuSR spectrometer

First test in ISIS:

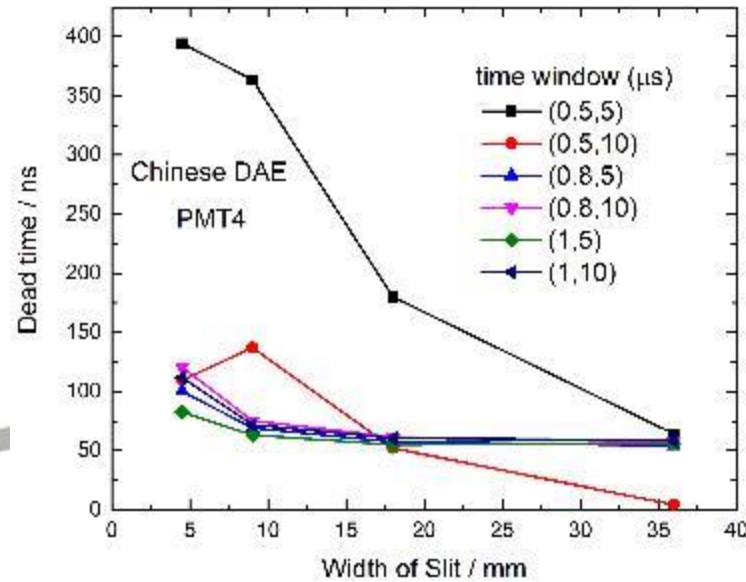
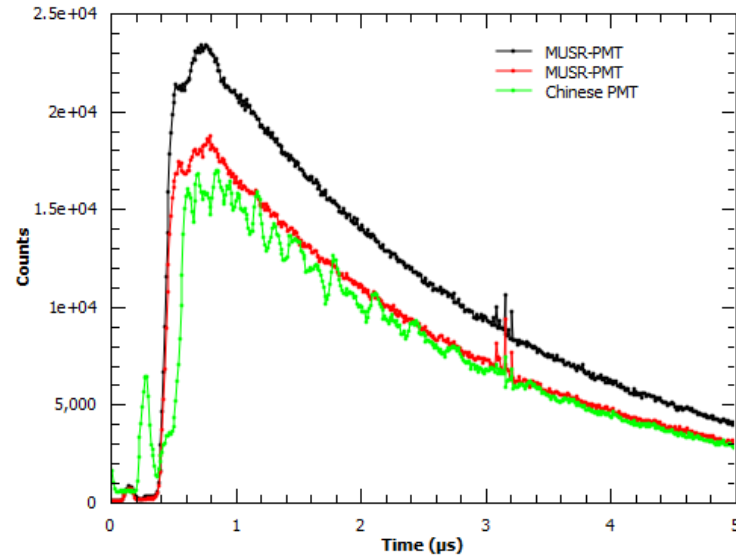


# 1 Designing and testing the first Chinese MuSR spectrometer

First test in ISIS:



ZF measurement



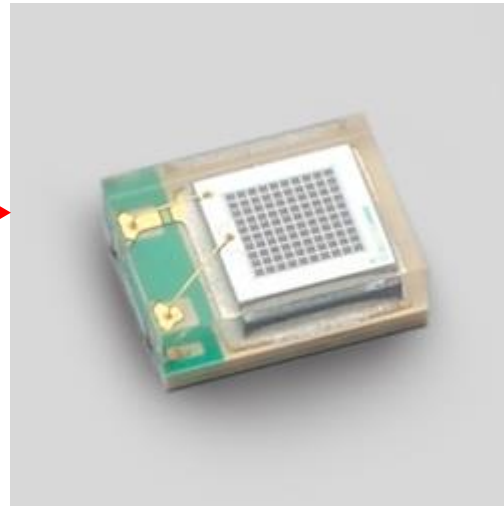
## 2 Building and Testing SiPM-based EMU detector

Possible scheme

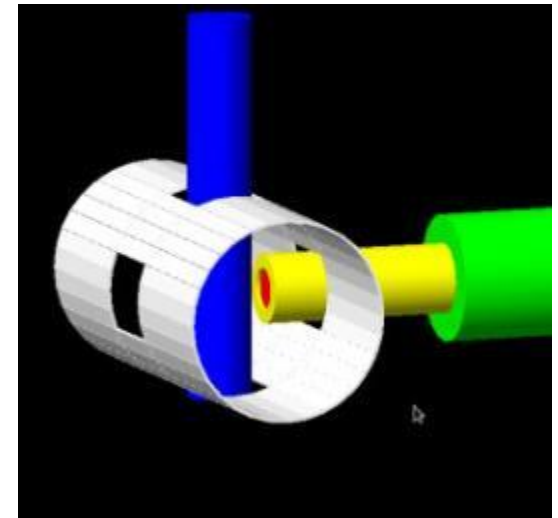
EMU



SiPM detectors

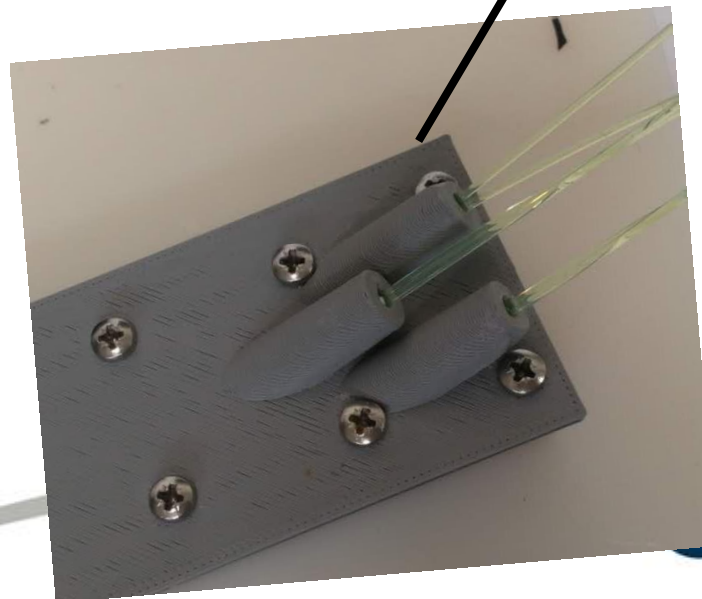
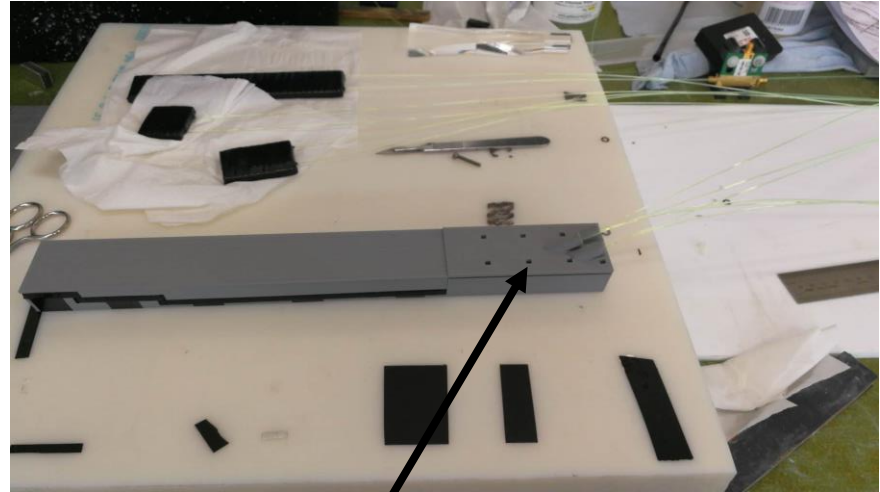
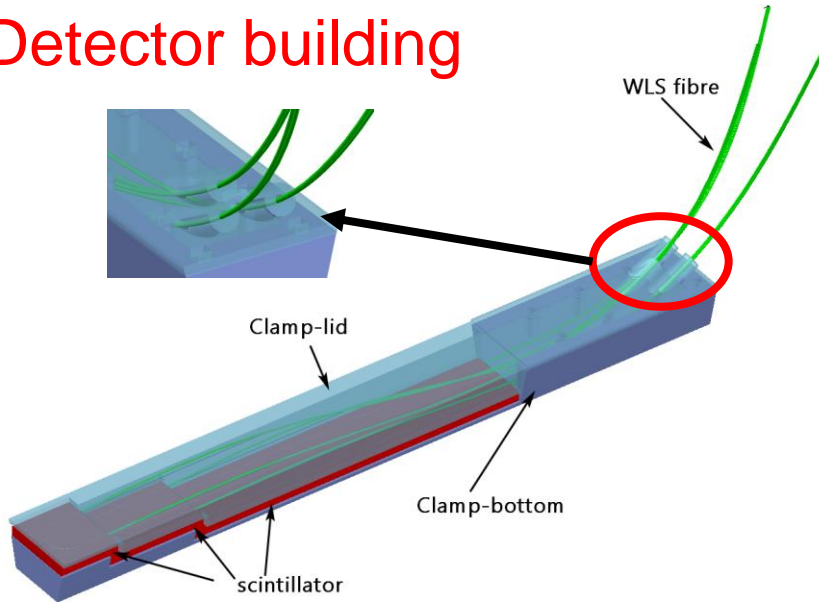


Super-MuSR



## 2 Building and Testing SiPM-based EMU detector

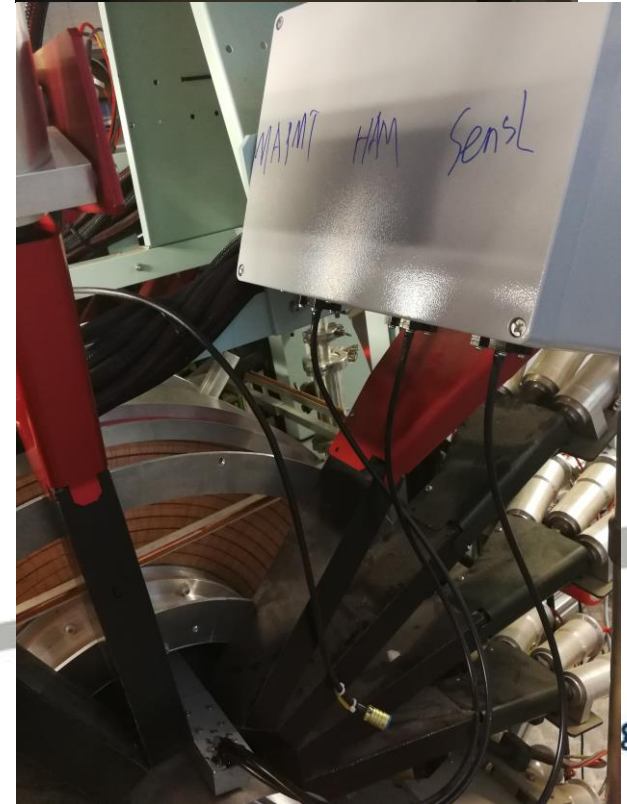
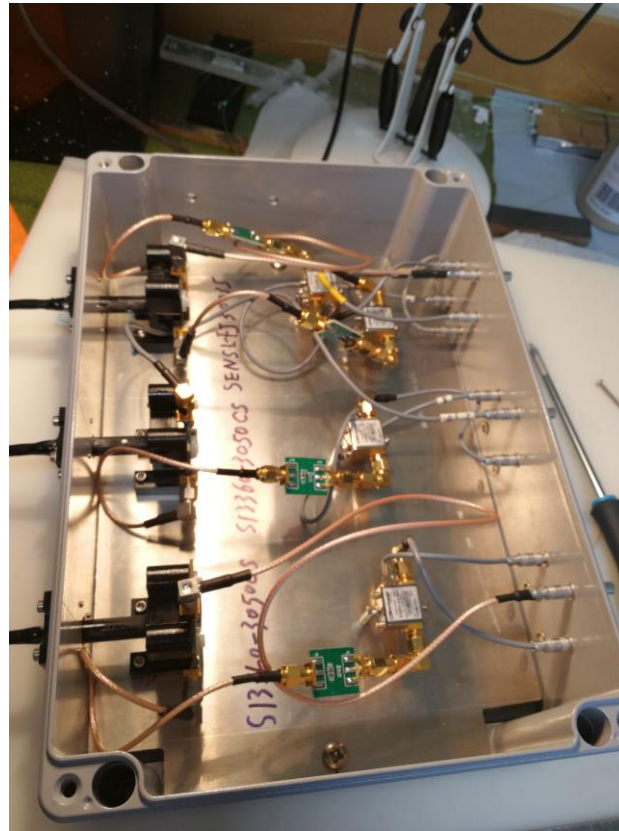
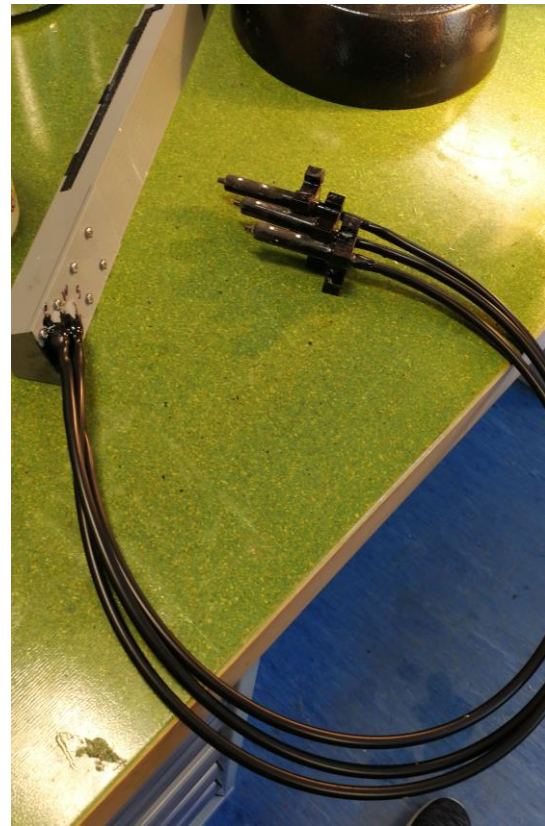
### Detector building





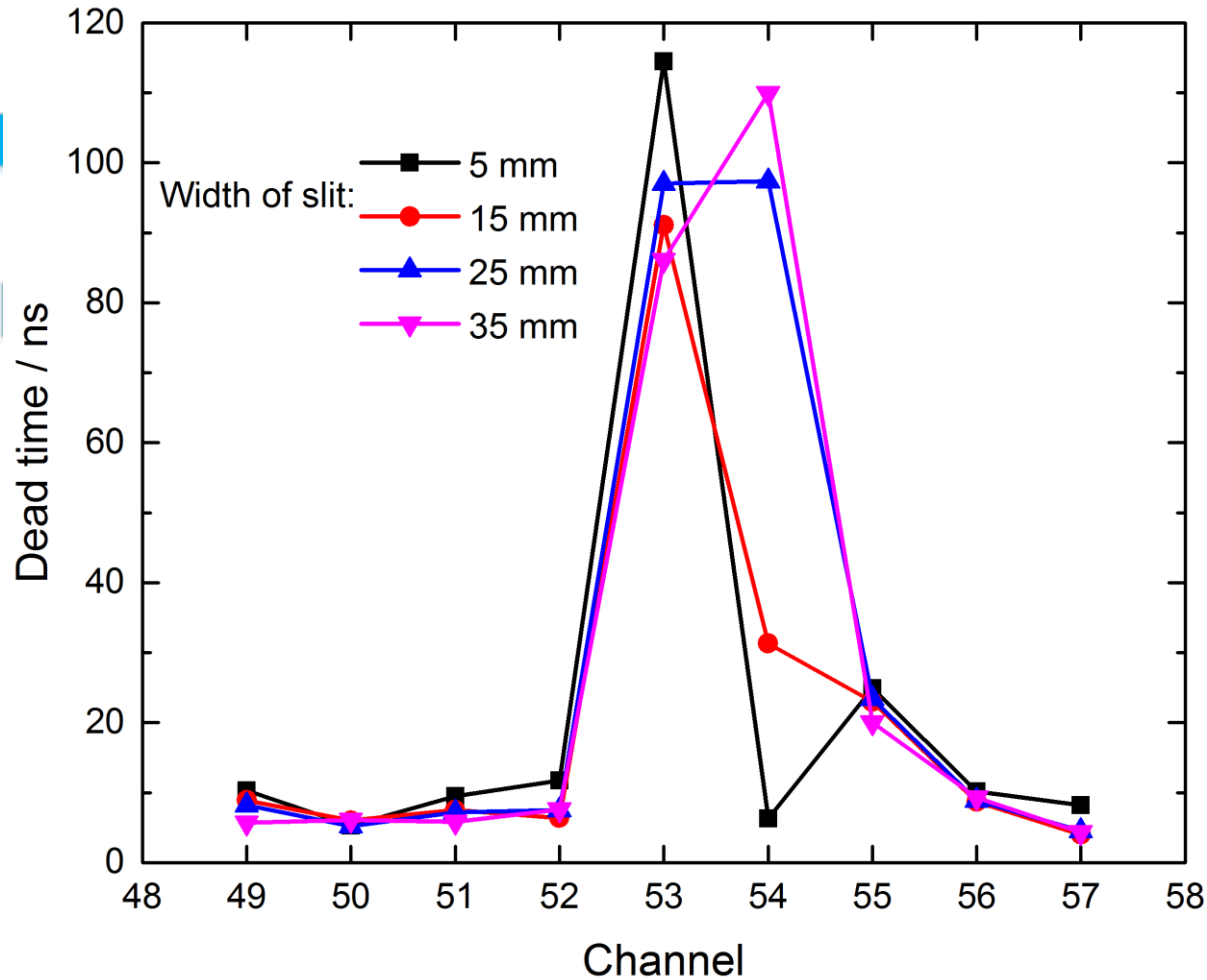
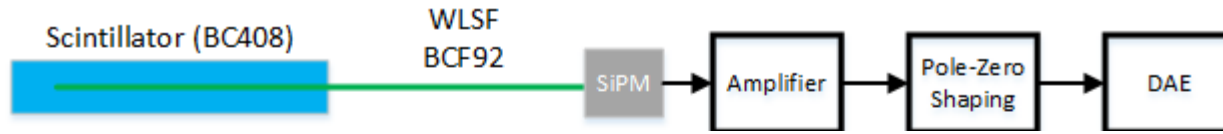
## 2 Building and Testing SiPM-based EMU detector

### Detector building



## 2 Building and Testing SiPM-based EMU detector

Beam test

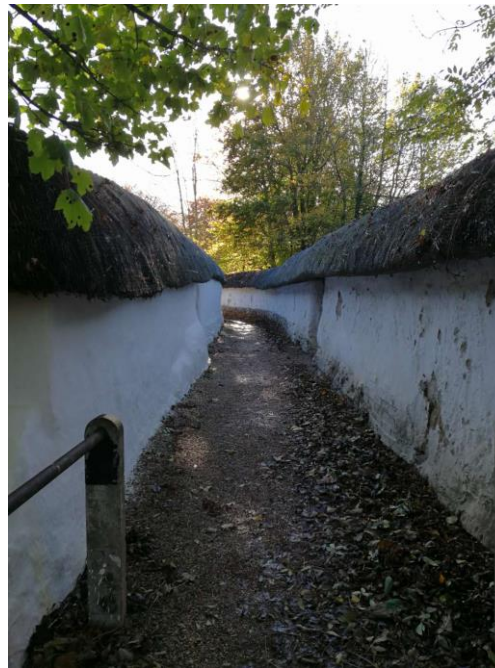


### 3 Life in UK

*First time to Oxford*



*Visiting Blewbury*



*Visiting Appleton*



# 3 Life in UK

*Thames river*



*Visiting Wallingford*



### 3 Life in UK

*Bridge across  
Thames river*



*Sunset at Oxford*



# 3 Life in UK

## *Visiting London*



*Thanks!*



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