



Detected 1.5 million cosmic ray muon pulses in 3 scintillator detectors at the Queensborough Community College Physics Department, a QuarkNet Center in Bayside, New York on November 1<sup>st</sup>, 2016

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**QuarkNet Detector**

Scintillator:  
 Eljen-200,  
 PVT with organic fluors,  
 Light output 64% Anthracene,  
 $\lambda$  max emission 425 nm,  
 rise time 0.9ns,  
 decay time 2.1 ns,  
 pulse width 2.5nm FWHM.

Photomultiplier tubes:  
 Sens-Tech P30CW5,  
 $\lambda$  max response 350 nm  
 output pulse rise time 4.5ns, 7 FWHM

DAQ Board series 6000

**Performance Study**

