

# H8500 SPE Signal Loss Study

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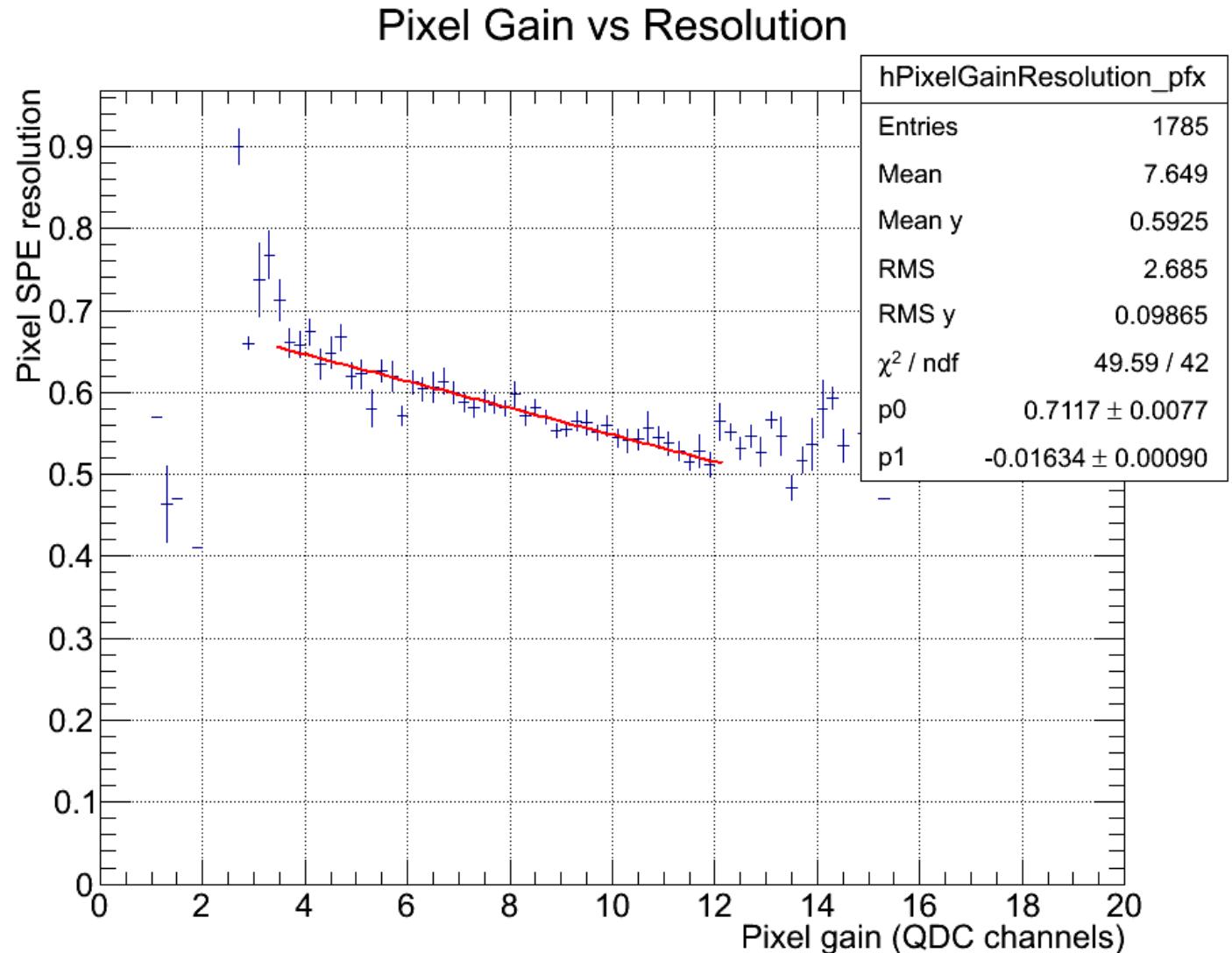
CLAS12 RICH Phone Meeting | 08/03/2013

JOHANNES GUTENBERG  
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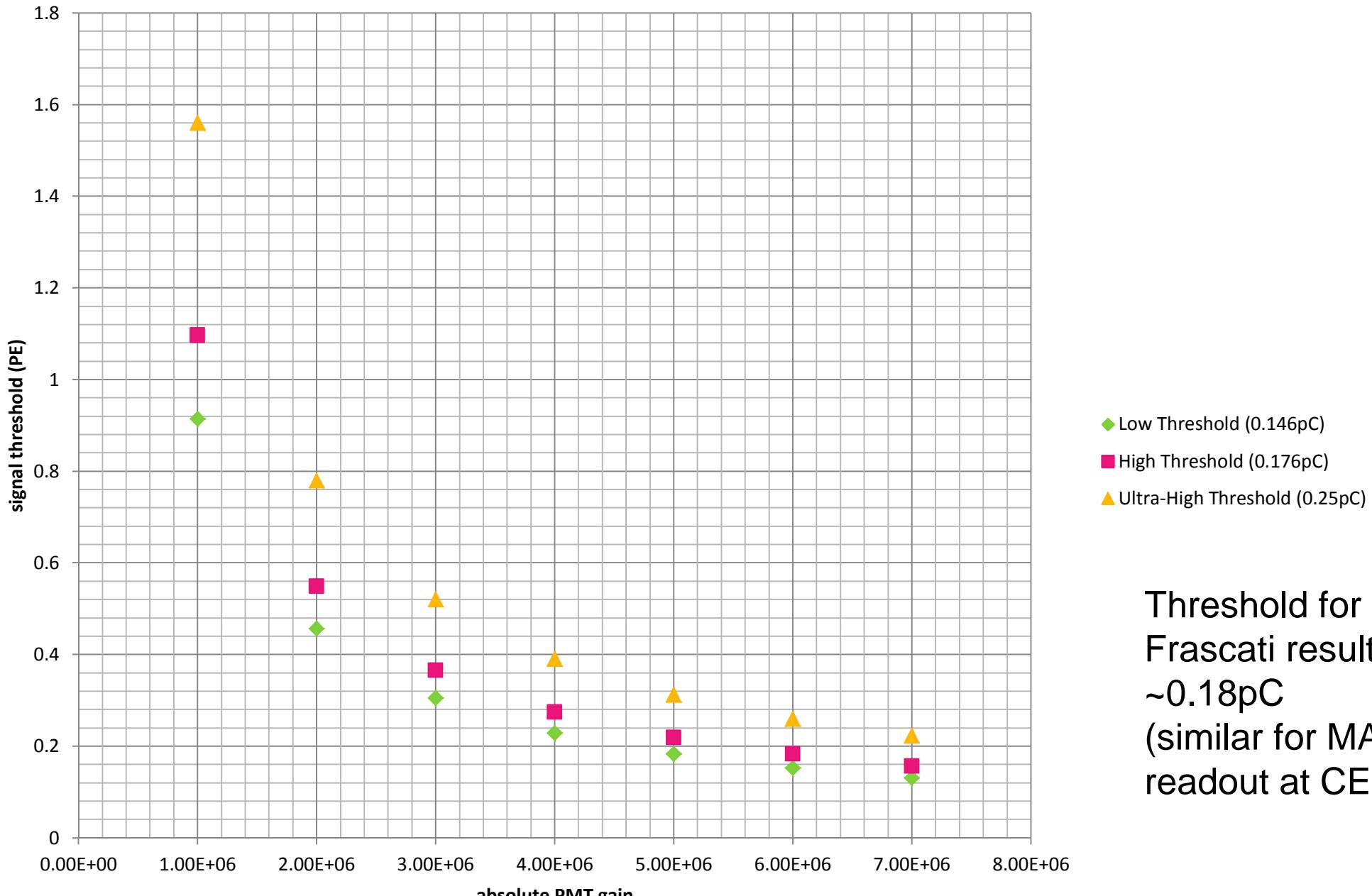


# Pixel Gain & SPE Resolution

- Based on Frascati MAPMT scan results (thanks to Marco Mirazita)
- HV was 1075V
- SPE resolution is independent of HV
- Correlation between gain and resolution observed



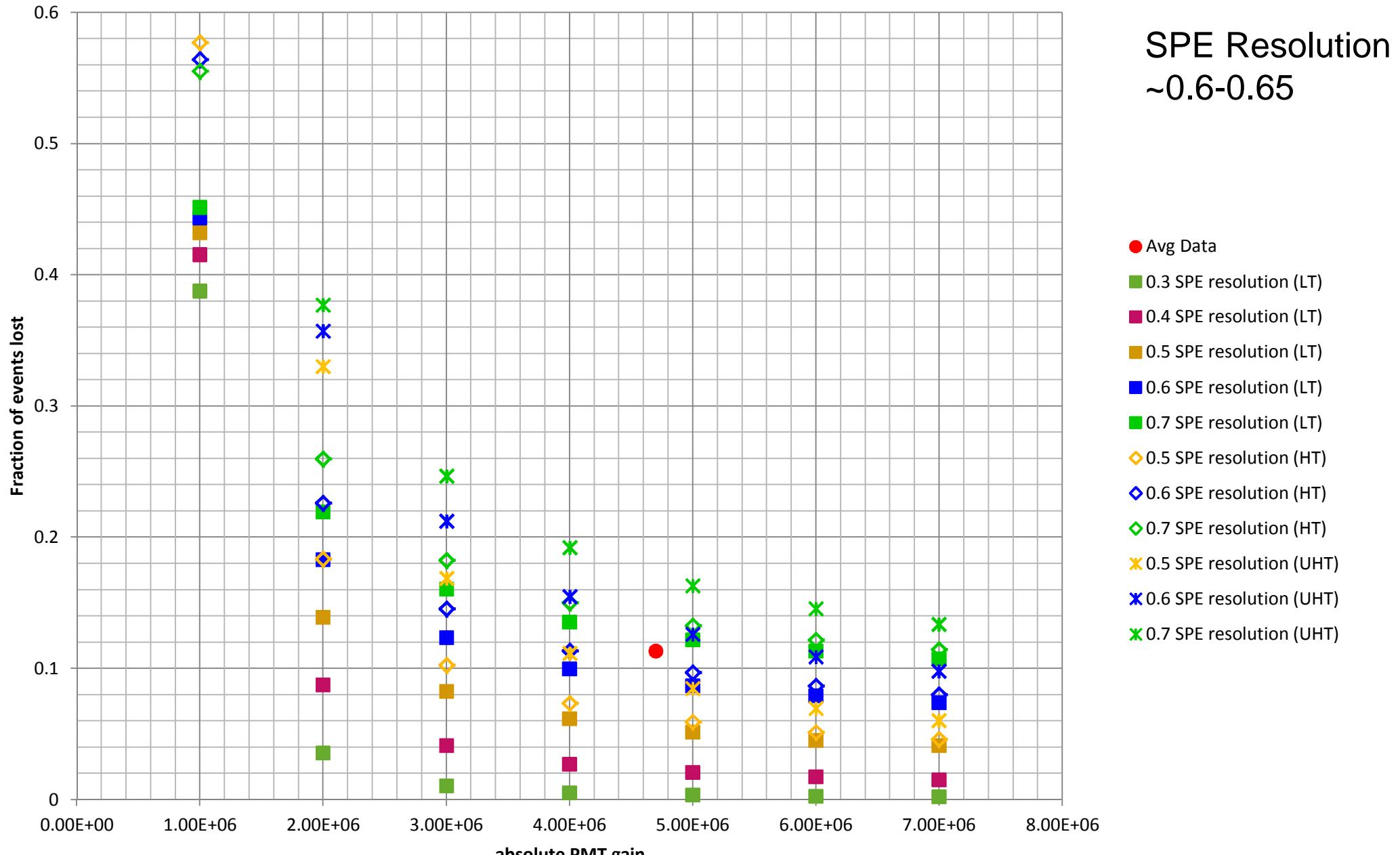
# Signal Threshold & MAPMT Gain



◆ Low Threshold (0.146pC)  
■ High Threshold (0.176pC)  
▲ Ultra-High Threshold (0.25pC)

Threshold for  
Frascati results  
~0.18pC  
(similar for MAROC  
readout at CERN)

# SPE Loss Estimate



SPE Resolution  
~0.6-0.65