

# Scintillator Signal & Background at e-LASER IP

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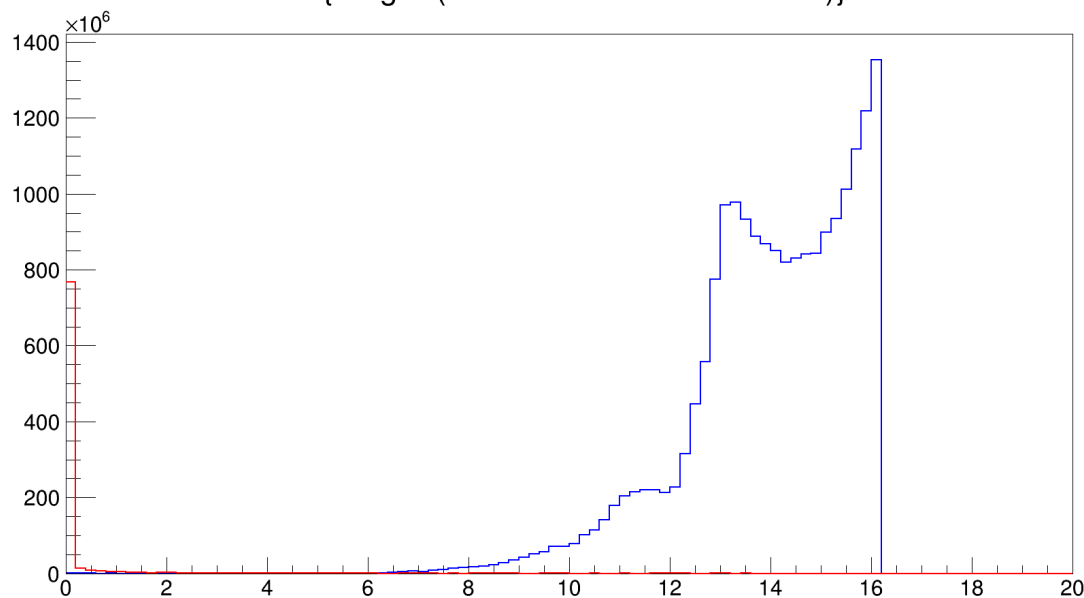
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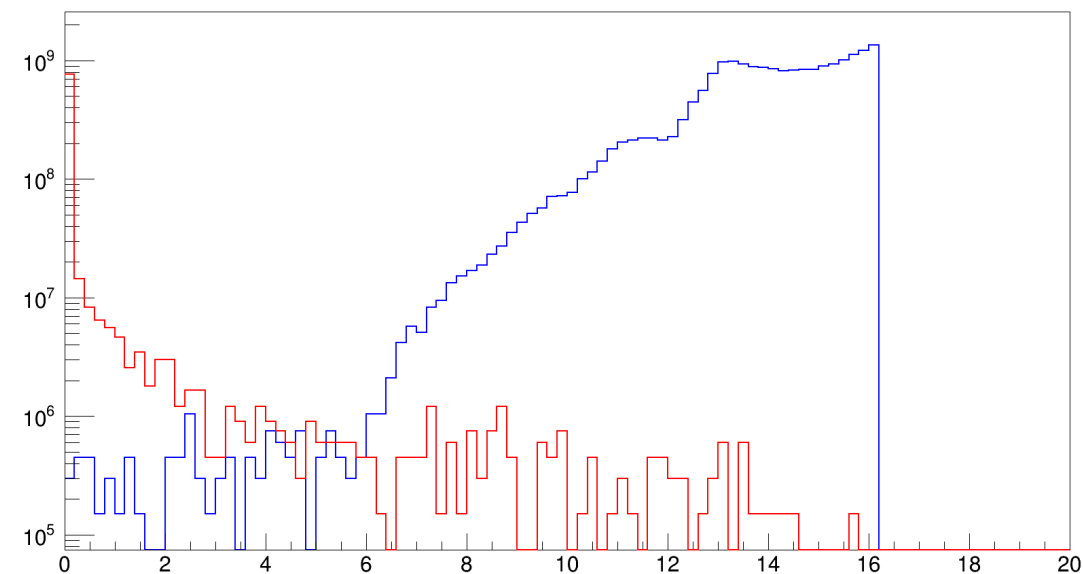
The logo for the LUXE experiment, featuring the word "LUXE" in a bold, blue, sans-serif font. The letter "X" is stylized with a white starburst or spark-like graphic in the center.

All  
Particles  
→

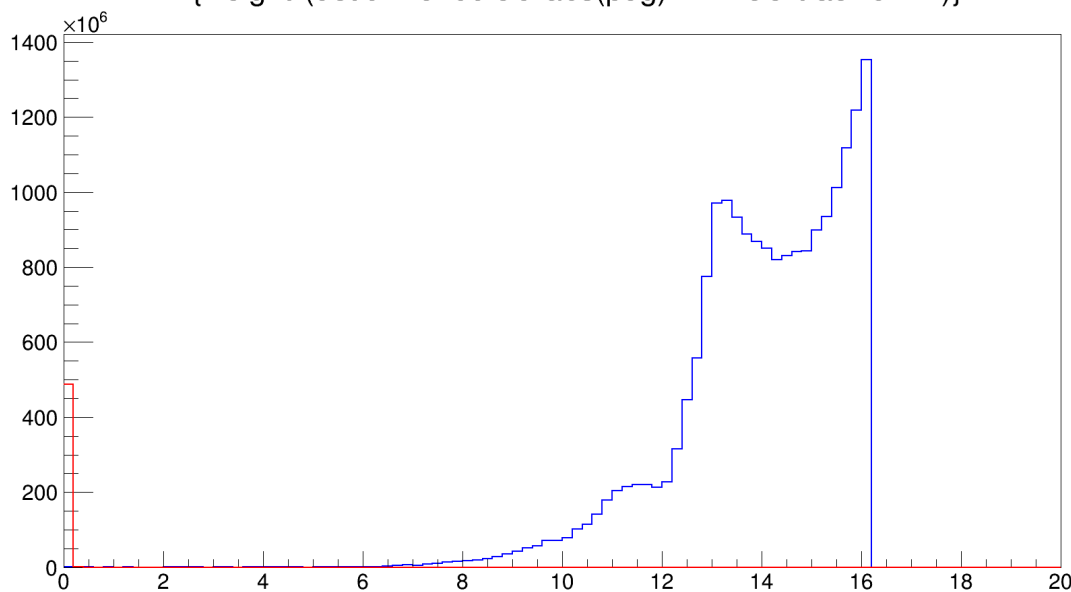
$E \{ \text{weight} * (\text{detid} == 6200 \ \&\& \ \text{trackid} == 1) \}$



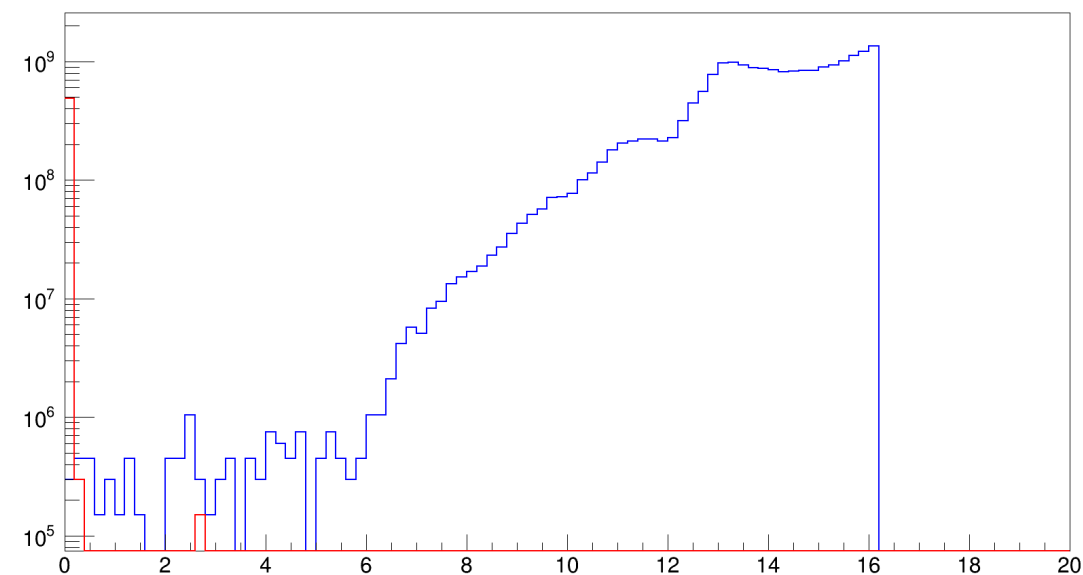
$E \{ \text{weight} * (\text{detid} == 6200 \ \&\& \ \text{trackid} == 1) \}$



$E \{ \text{weight} * (\text{detid} == 6200 \ \&\& \ \text{abs}(\text{pdg}) == 11 \ \&\& \ \text{trackid} == 1) \}$



$E \{ \text{weight} * (\text{detid} == 6200 \ \&\& \ \text{abs}(\text{pdg}) == 11 \ \&\& \ \text{trackid} == 1) \}$

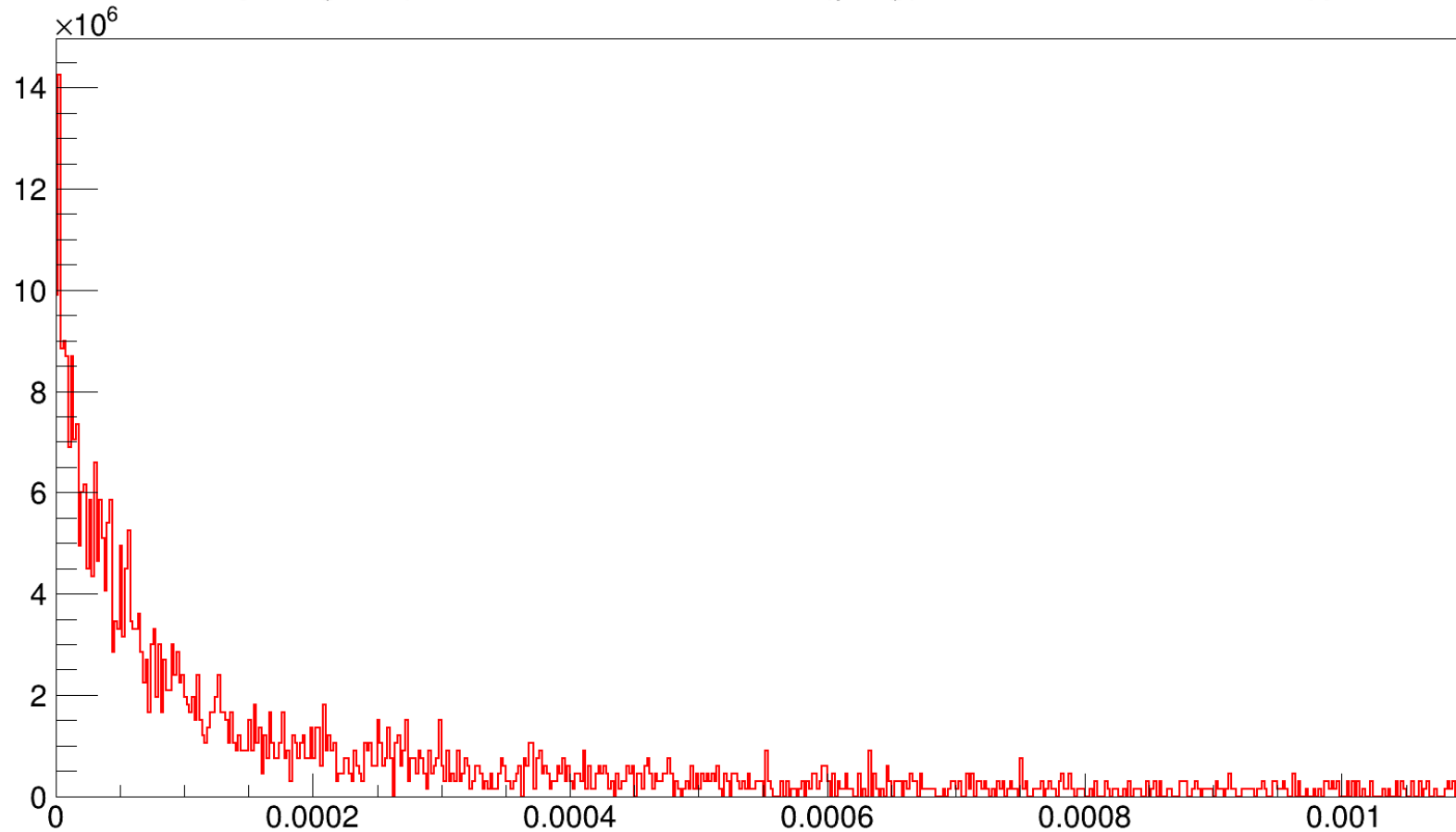


$e^-, e^+$   
Only  
→

Blue – Signal

Red - Background

E {weight\*(detid==6200 && abs(pdg)==11 && trackid!=1)}



**Super-zoom of background low-Energy leptons  
shows large proportion < 1 MeV  
Considerable fraction < 100 keV**

**Need to return some real numbers! And use Geant data from full-beam  
simulation..**

# Backup