

EMC Background

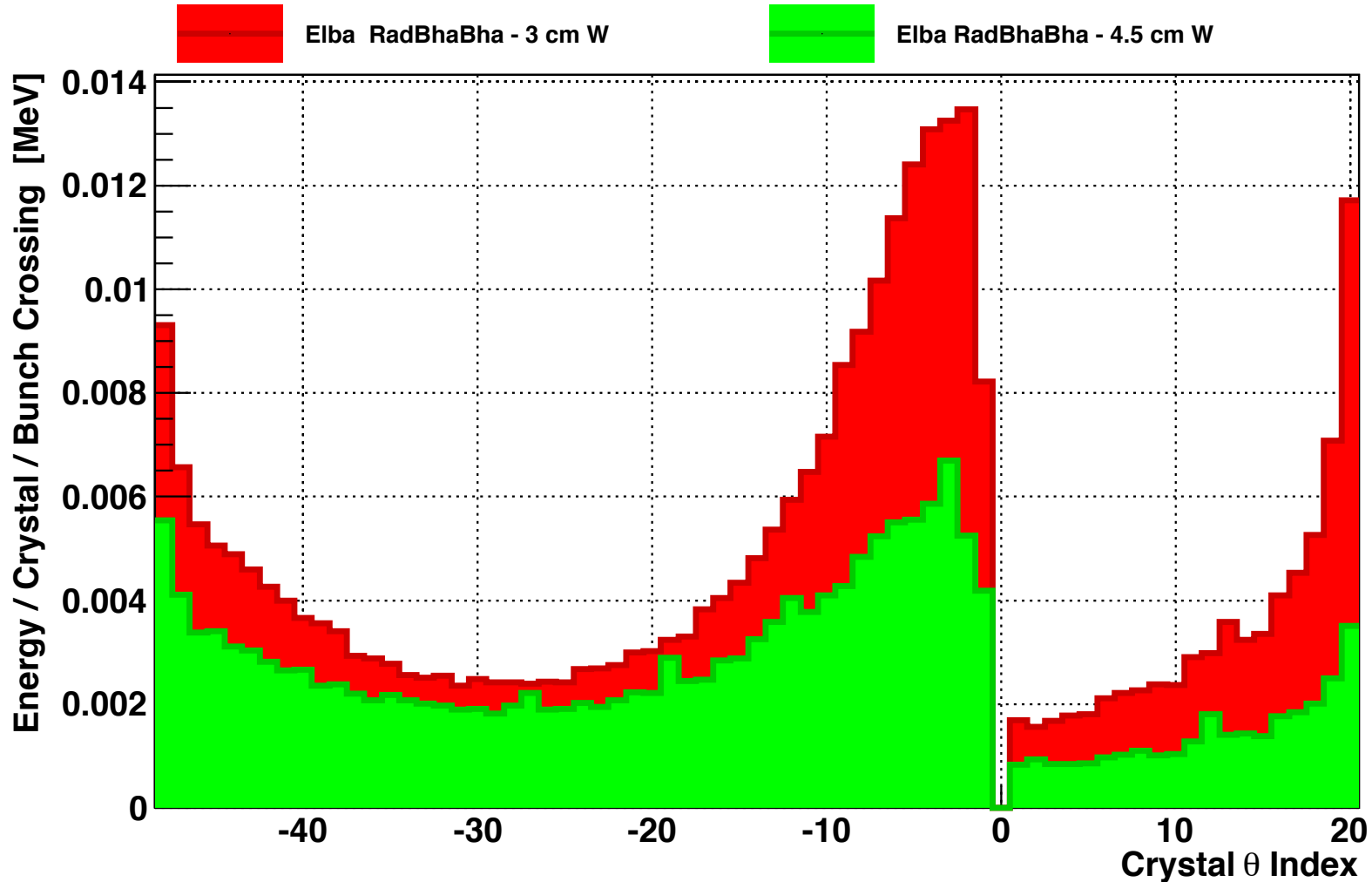
Stefano Germani



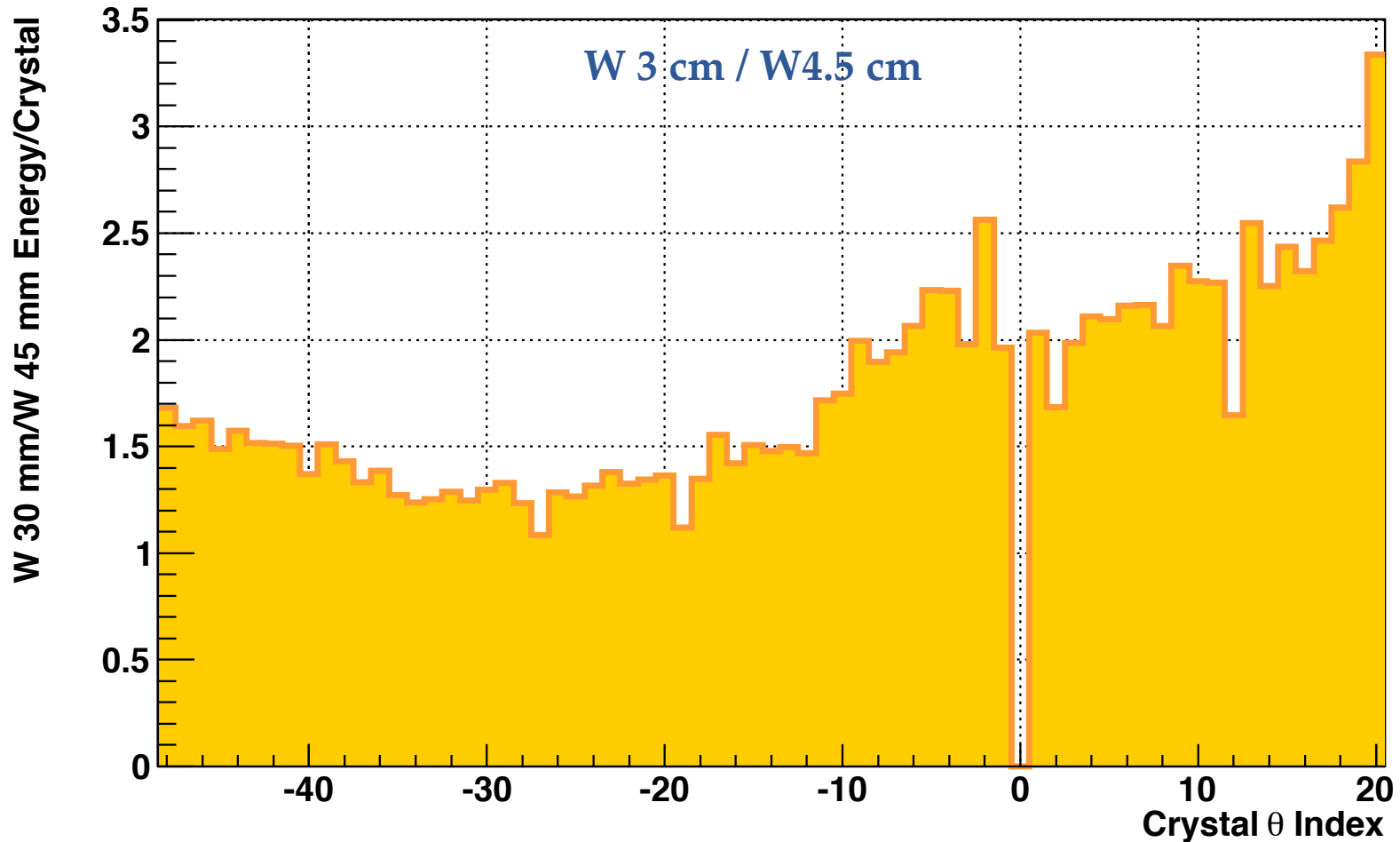
Outline

- Compare 3 and 4.5 cm shield with RadBhaBha
- Compare December 2011 (Frascati) and June 2011 (Elba) productions
- Barrel Resolution effects

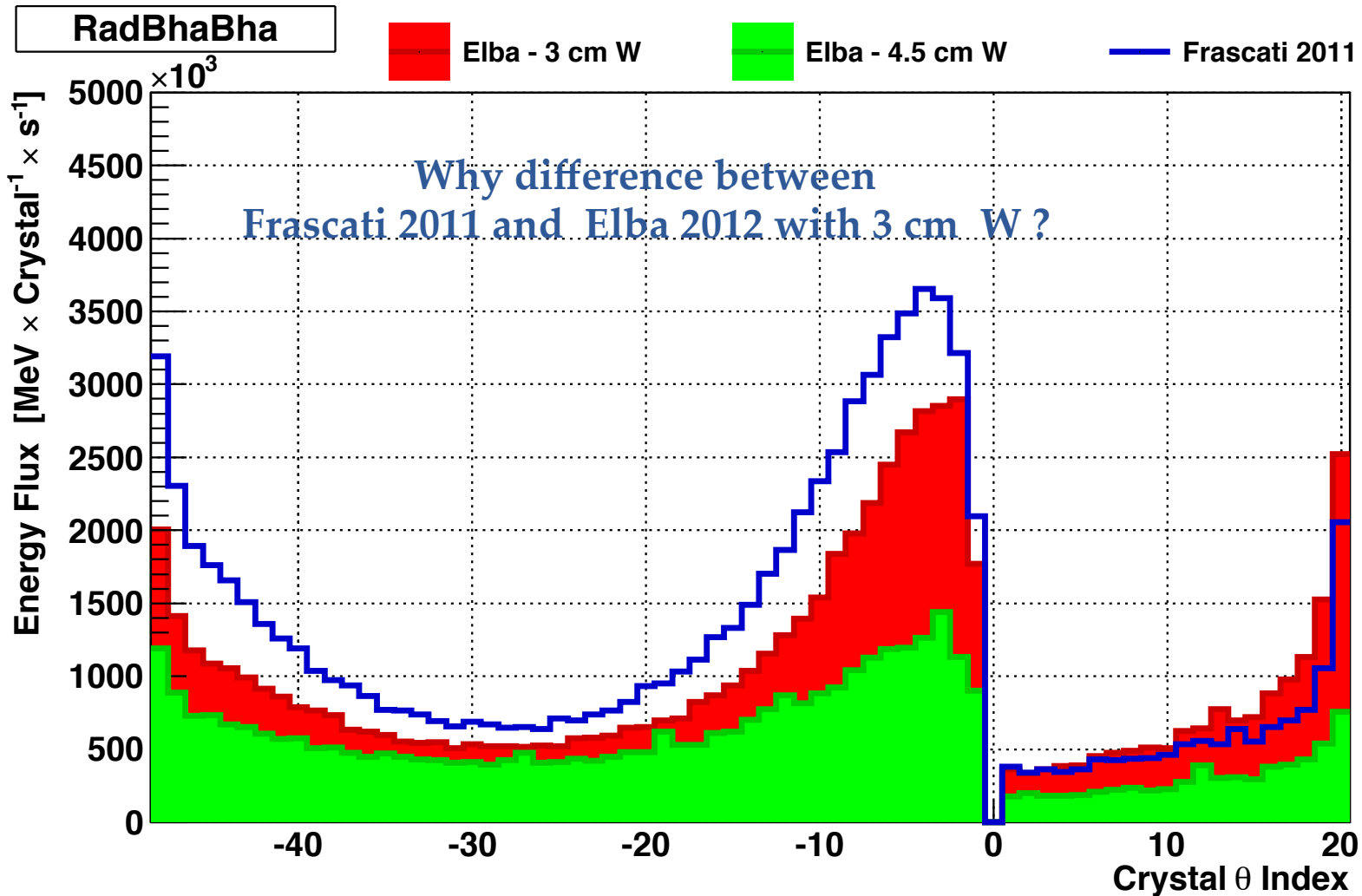
Compare Shields



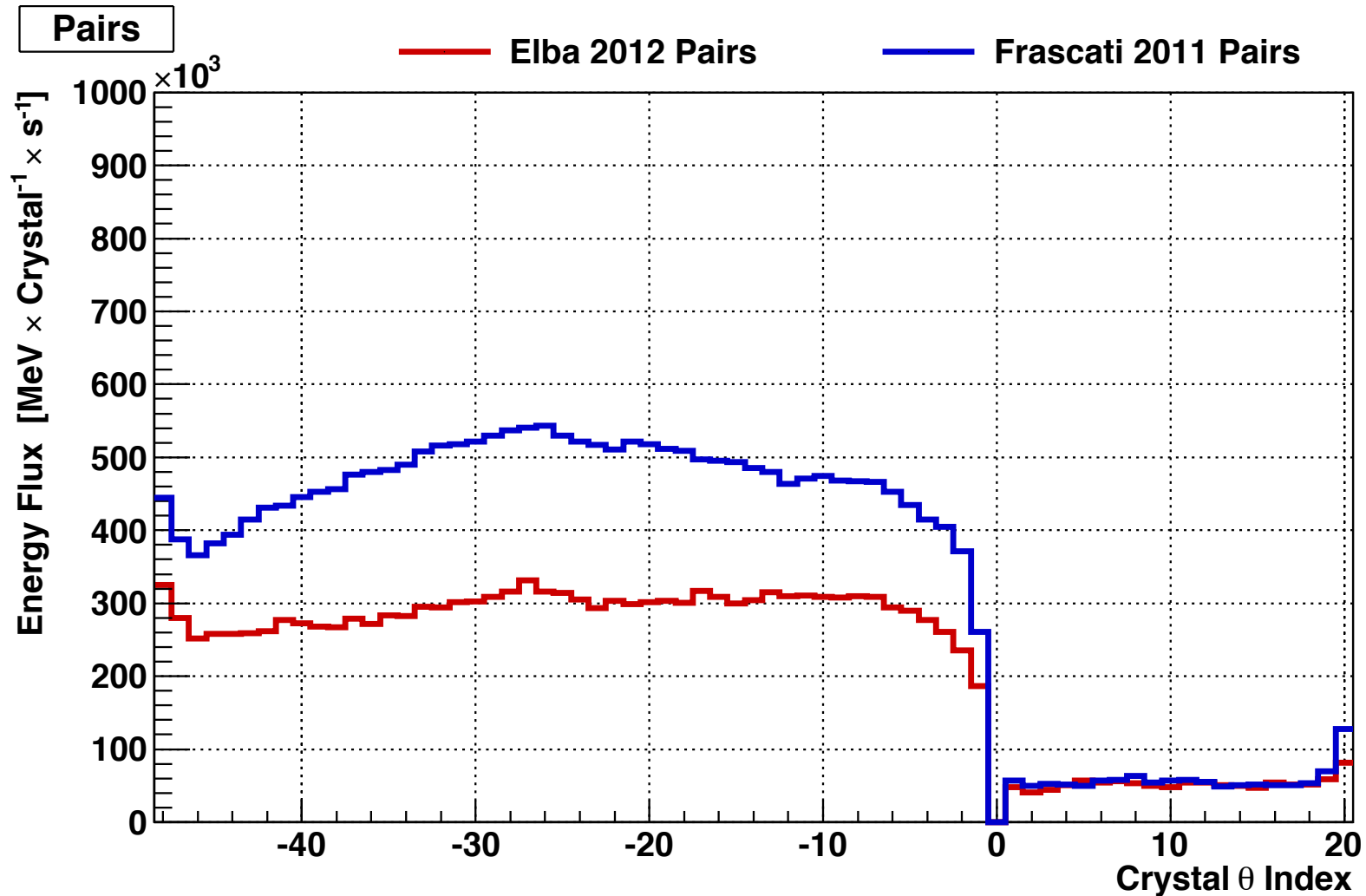
Compare Shields - Ratio



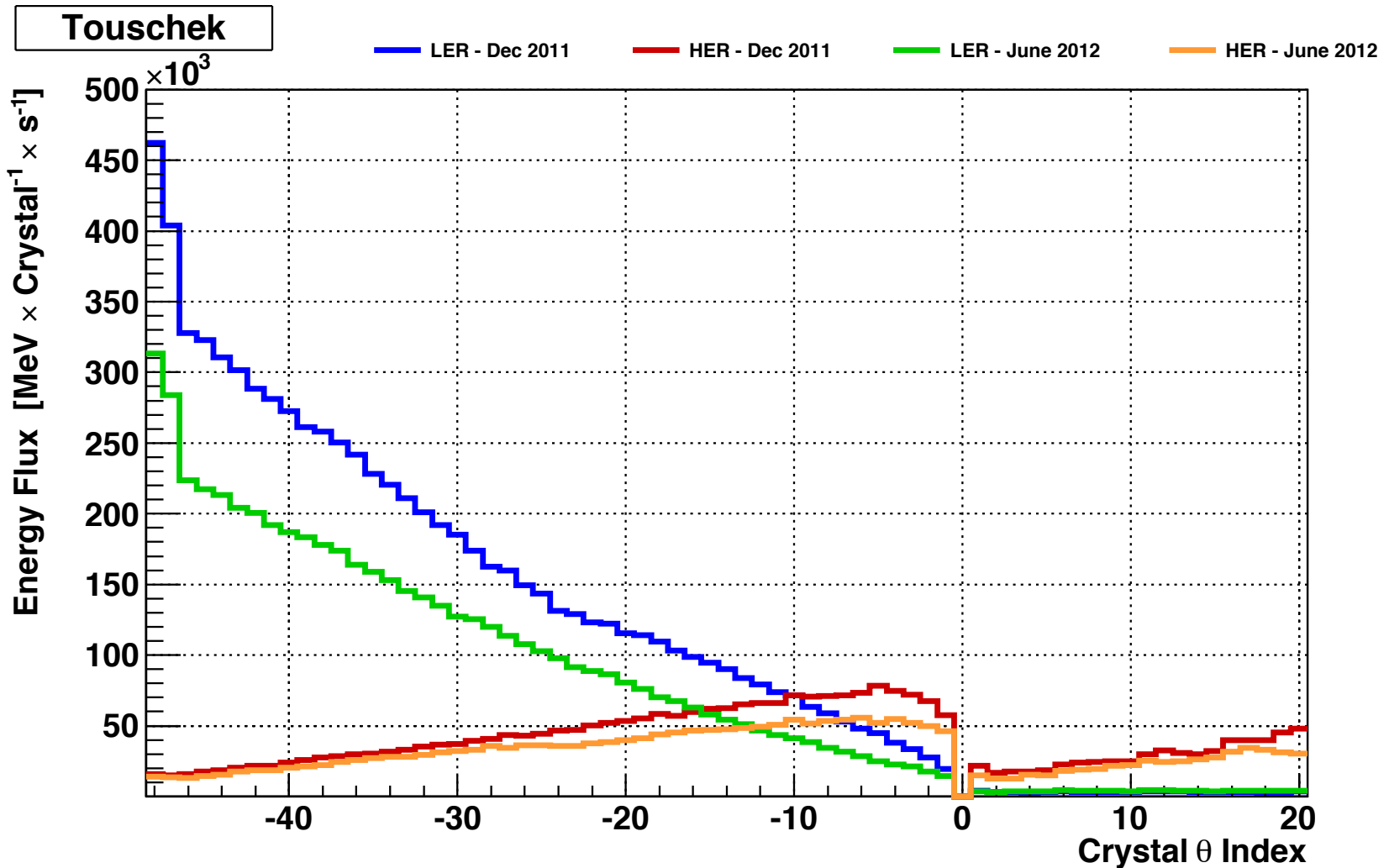
Compare RadBhaBha Prods



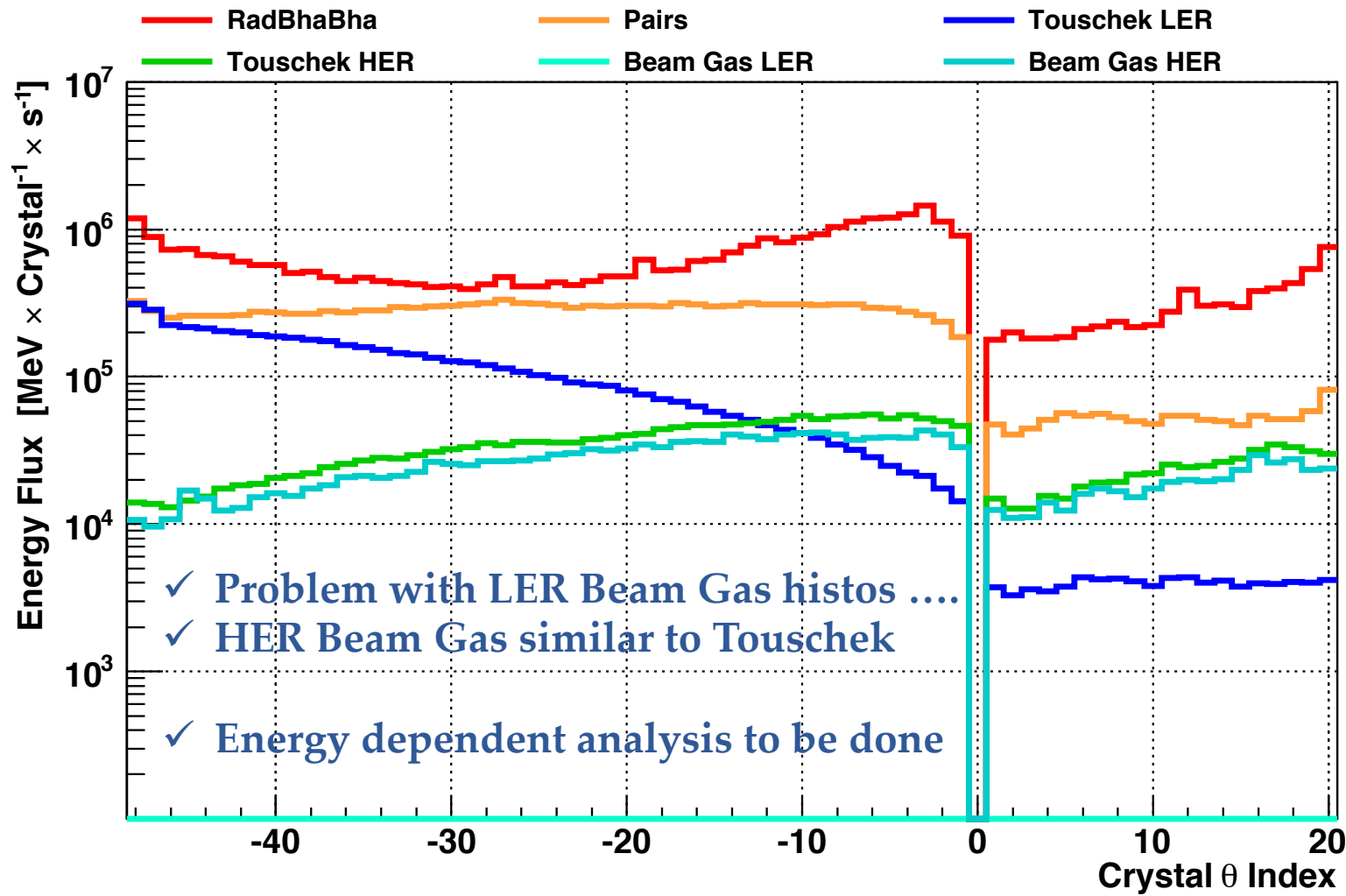
Compare Pairs Productions



Compare Touschek Prods

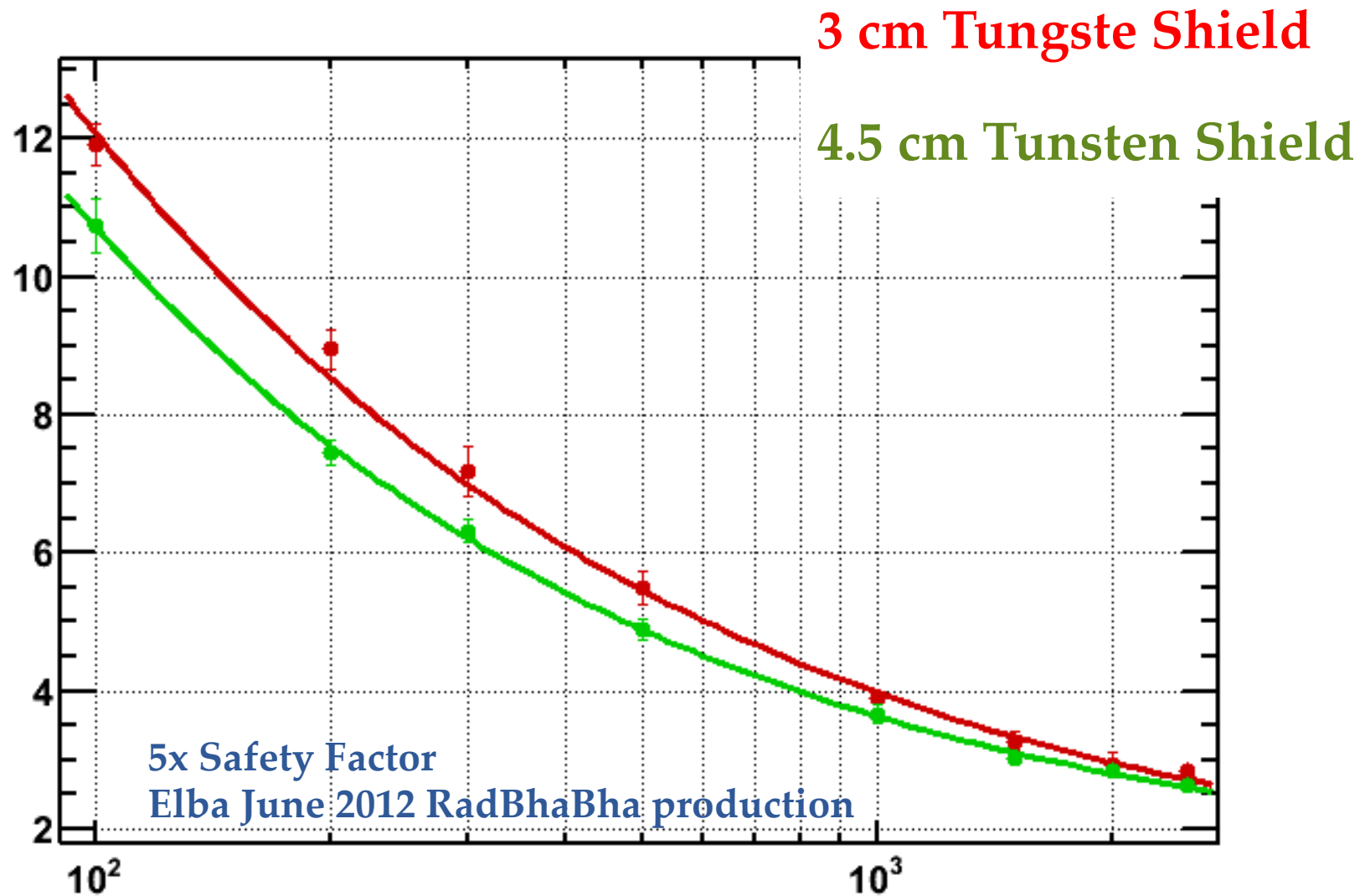


Compare Backgrounds-45mm W

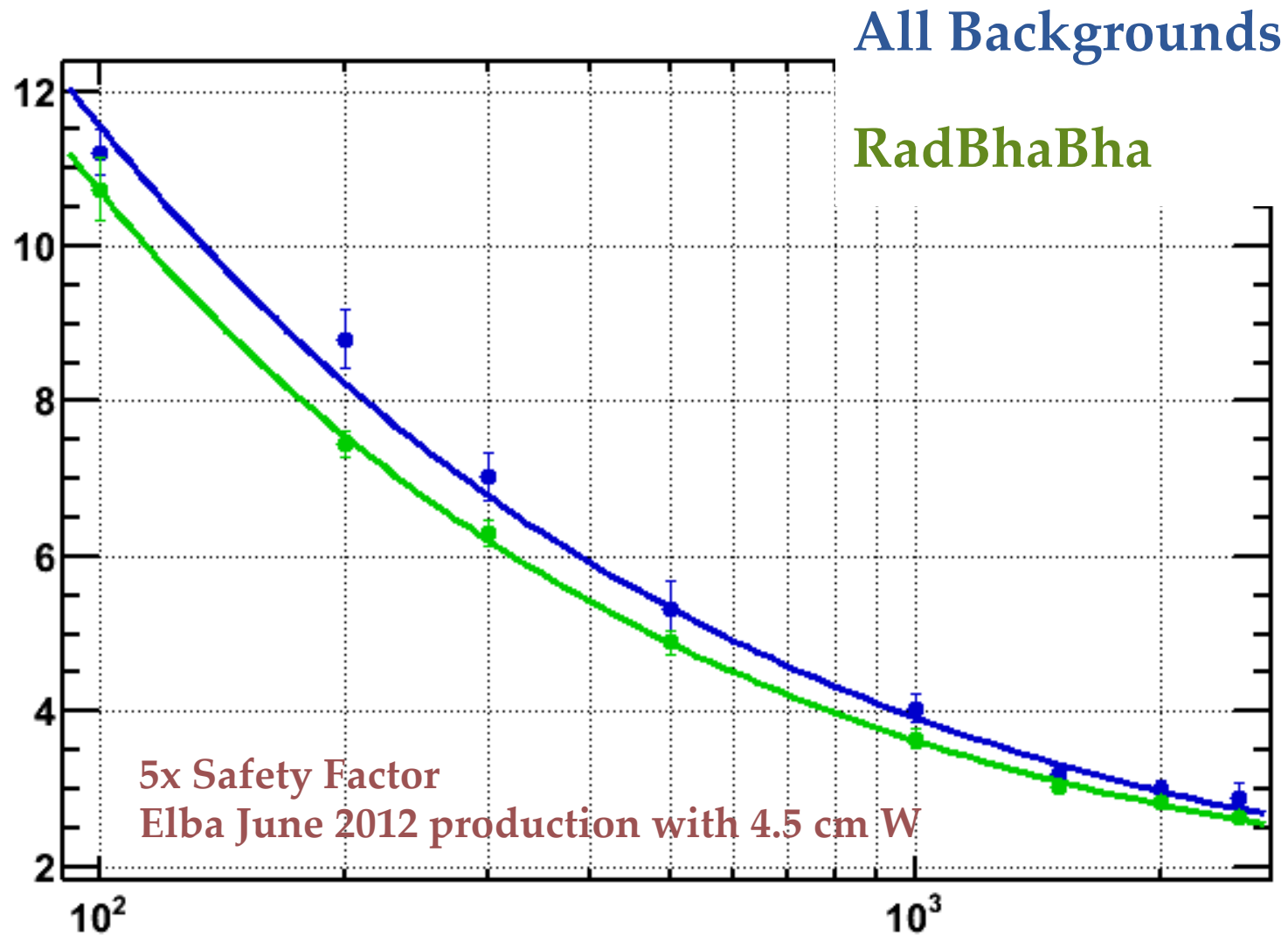


- ✓ Problem with LER Beam Gas histos
- ✓ HER Beam Gas similar to Touschek
- ✓ Energy dependent analysis to be done

Barrel Resolution vs Shield



Barrel Res vs Backgrounds



Conclusions and Outlook

- Significant impact on Deposited energy from 4.5 cm shield
 - Large effect in fwd direction
- Different backgrounds behaviour consistent with past productions
 - Need closer look to backgrounds
 - Need to fix LER Beam Gas
- Barrel Resolution
 - Small effect for sum of all backgrounds compared to RadBhaBha only
 - Significant but small effect on average barrel resolution
 - Need to study Barrel resolution effects vs Theta
- Need Fwd Resolution effects
 - LYSO
 - CsI
- Need to study time bins