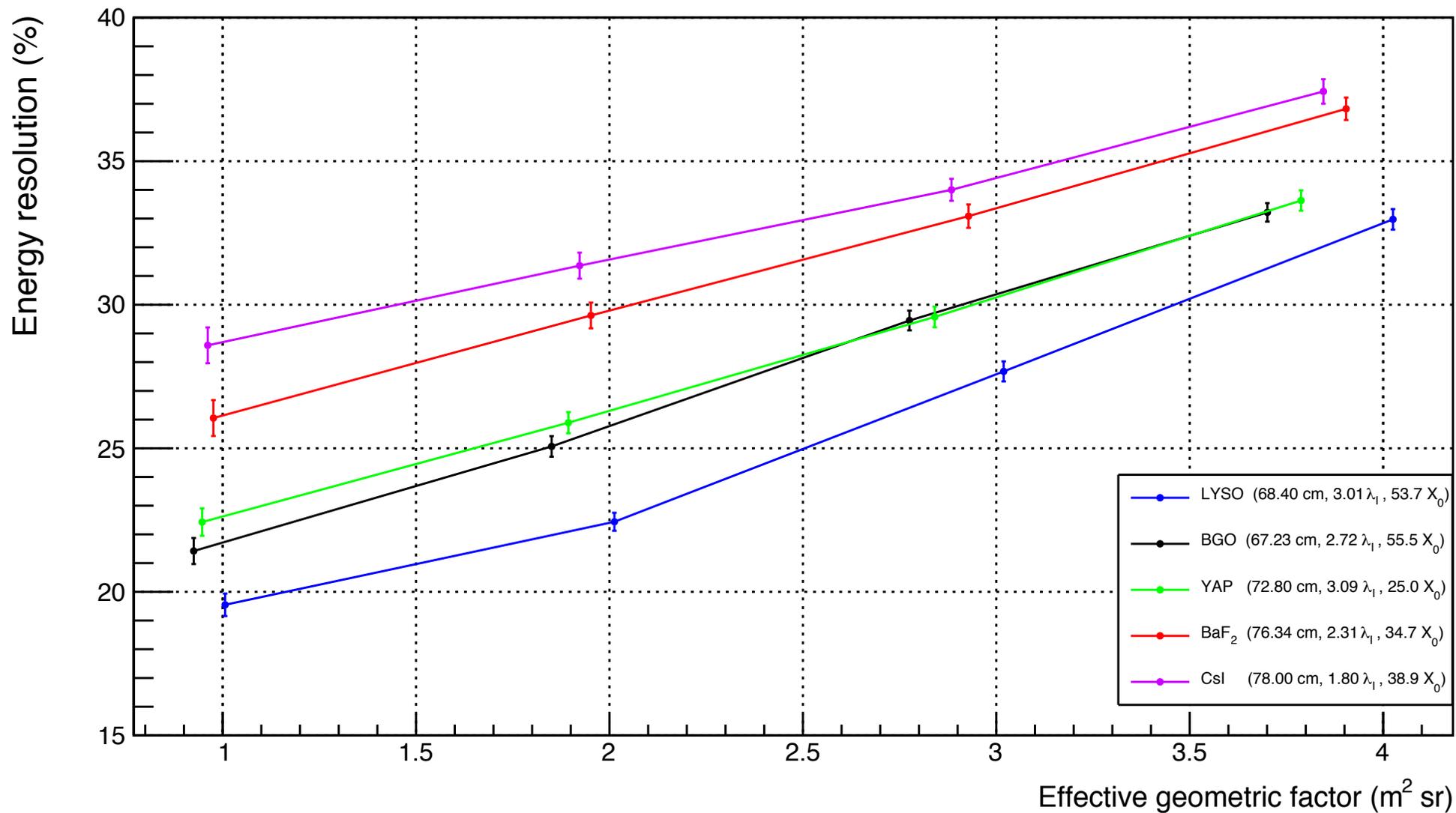
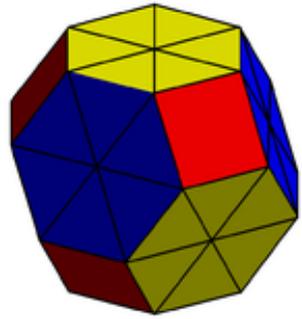


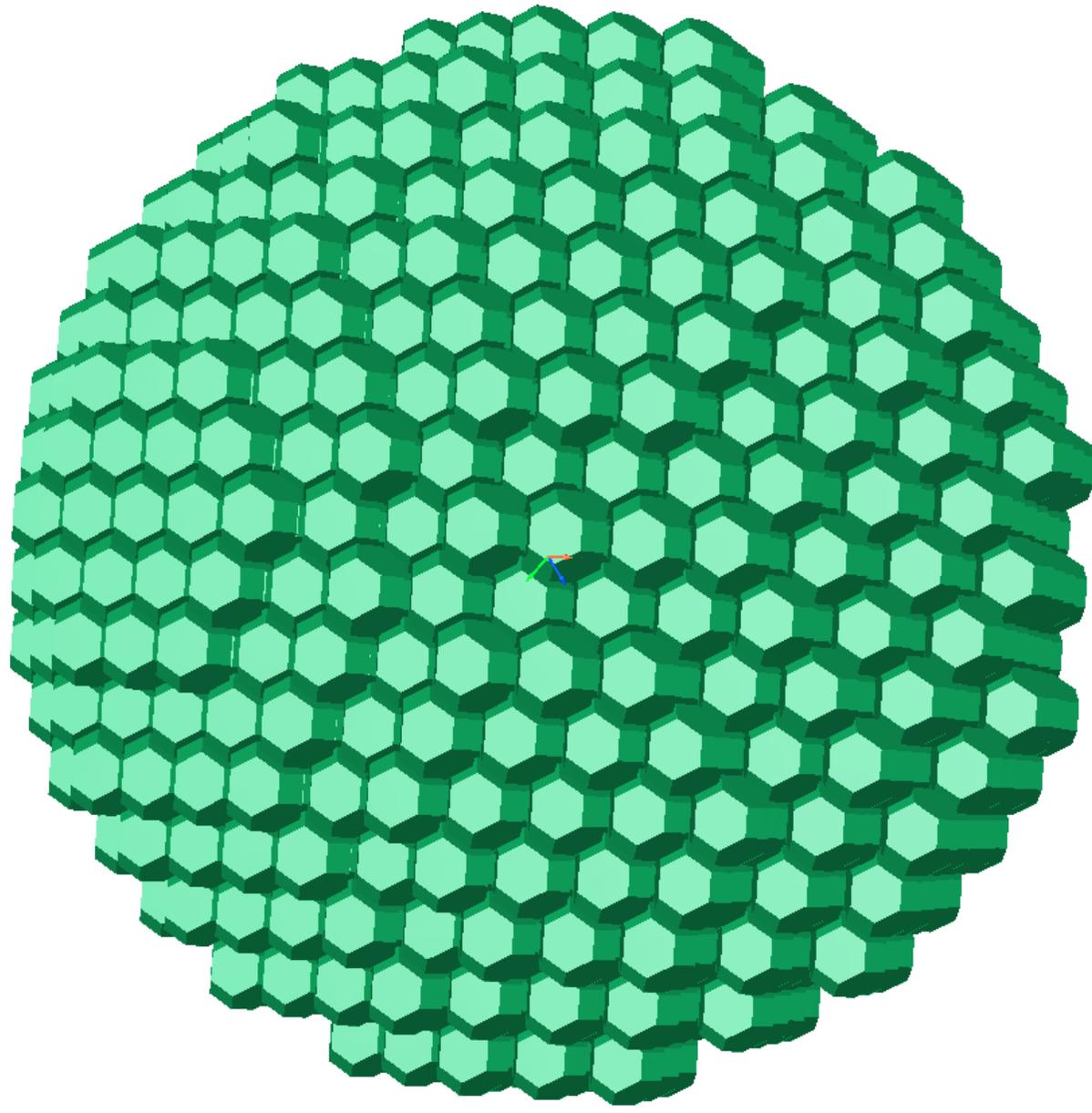
# **Simulazione: sviluppi sulle geometrie**

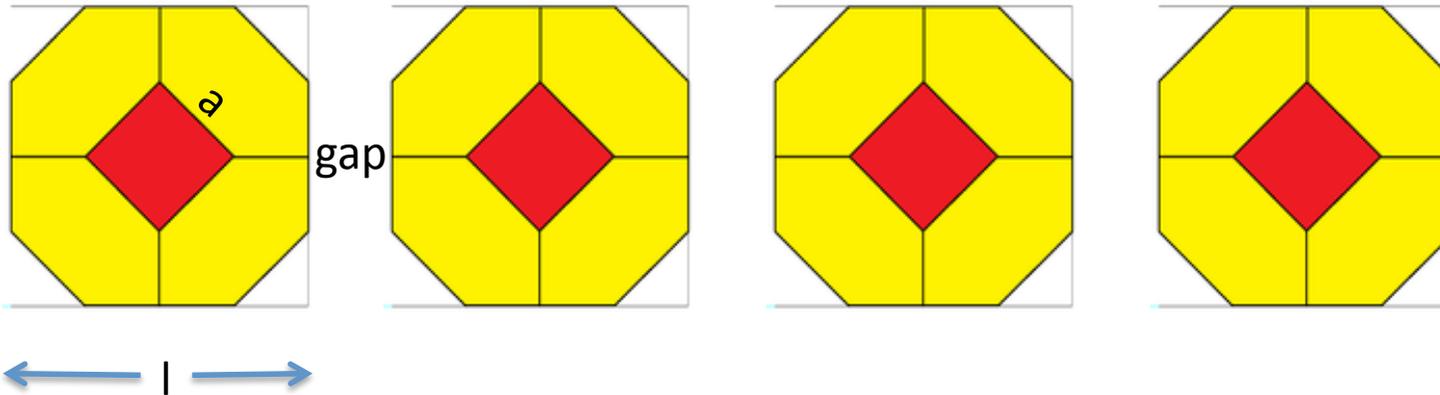


Cristallo base:  
ottaedro troncato



Configurazione sferica





Lato del quadrato  
 Dimensioni del cubo  
 Gap  
 Volume  
 Peso

$$a = 1.2 \text{ cm}$$

$$l = \sqrt{2} \times 2 \times a = 3.4 \text{ cm}$$

$$\text{gap} = 0.8 \text{ cm}$$

$$V = 8 \times \sqrt{2} \times a^3 = 19.55 \text{ cm}^3$$

$$W = 139.4 \text{ g}$$

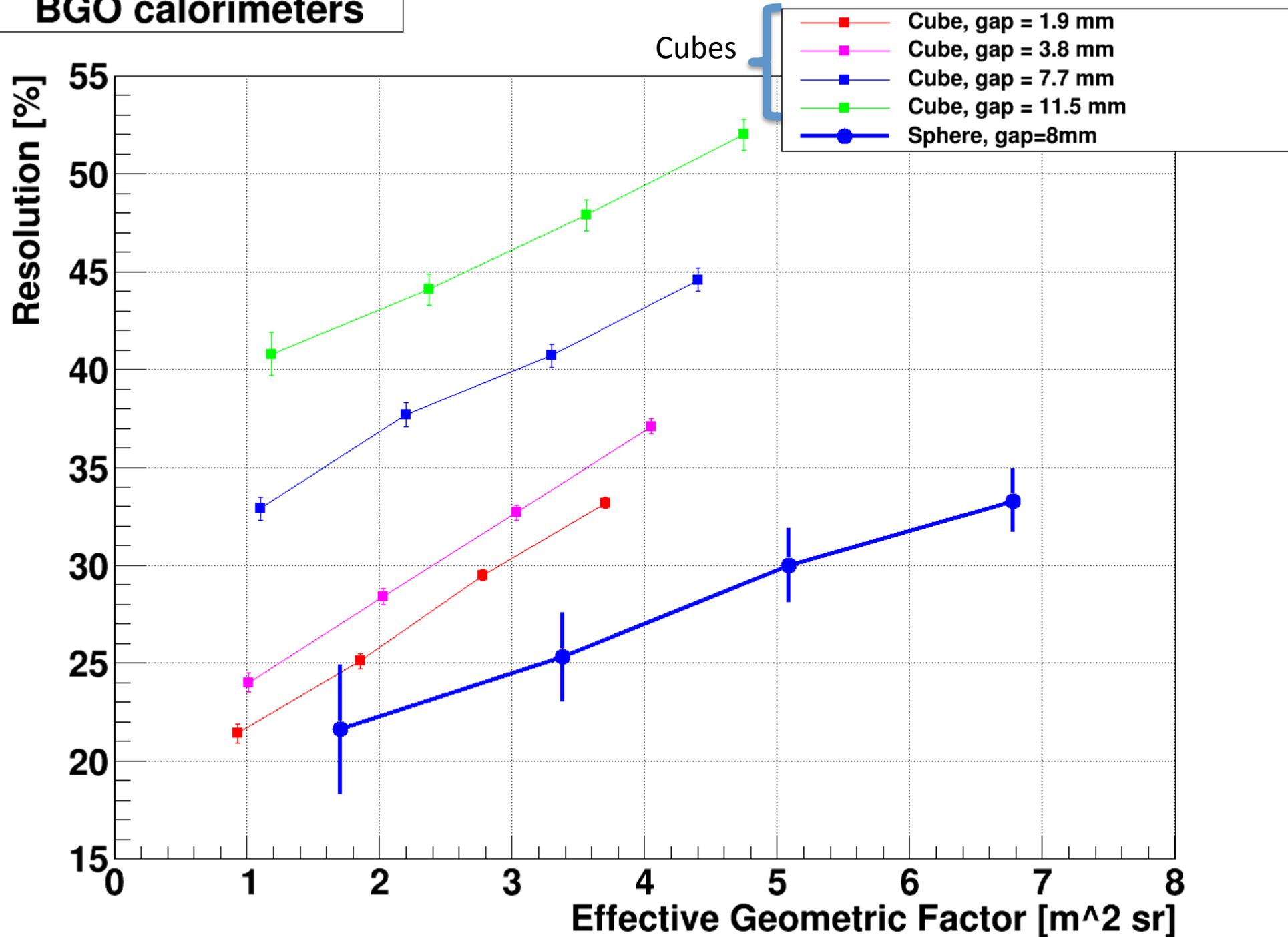
Cristallo singolo

Numero di cristalli sul diametro 25  
 Numero di cristalli totali 14361  
 Diametro complessivo 103.6 cm  
 Peso totale 2002 kg  
 Profondità sul diametro  $3.75 \lambda_l$   
 Fattore Geometrico  $10.6 \text{ m}^2 \text{ sr}$

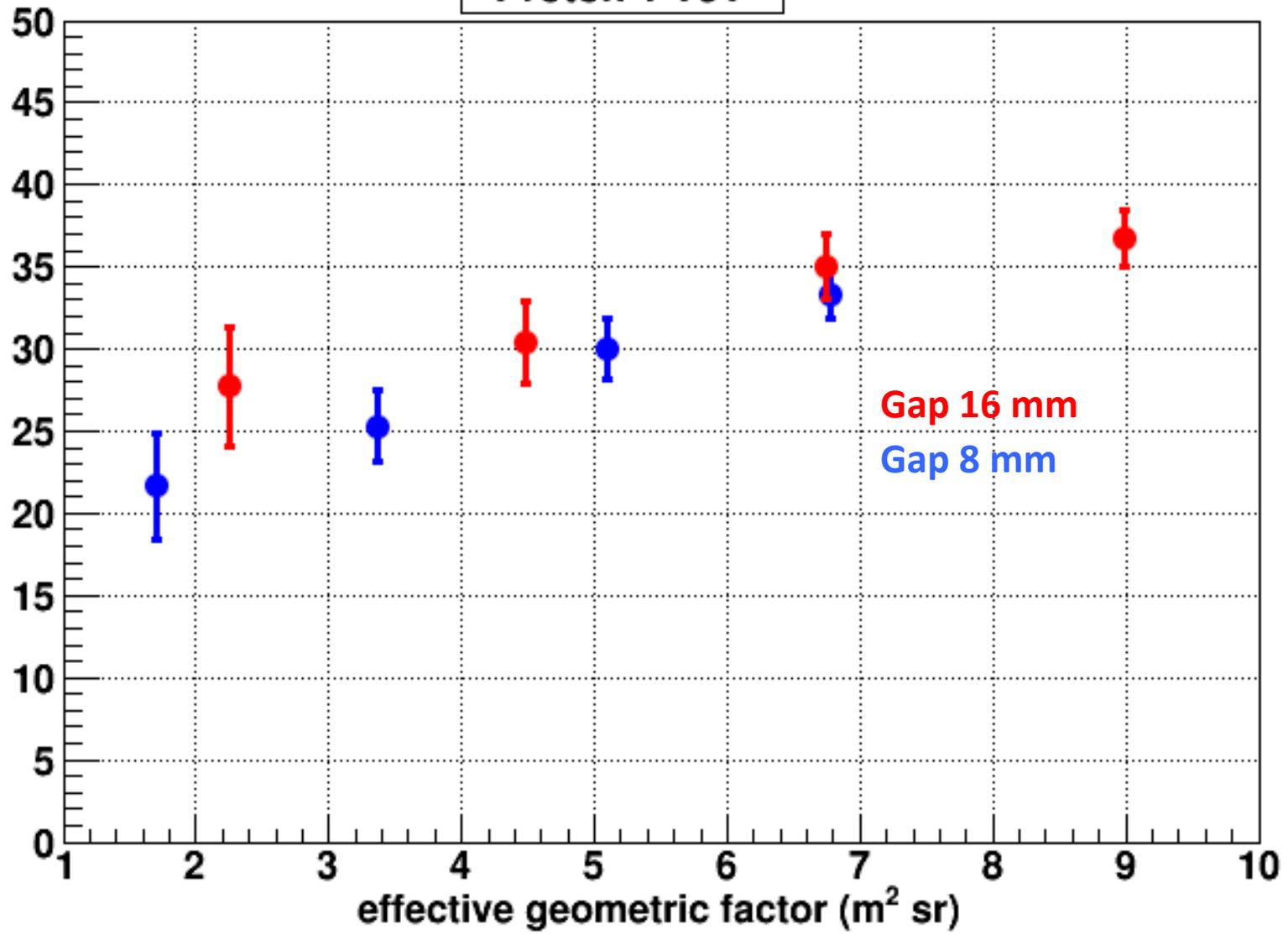
Calorimetro sferico

*(prima simulazione con approssimazione sferica)*

# BGO calorimeters

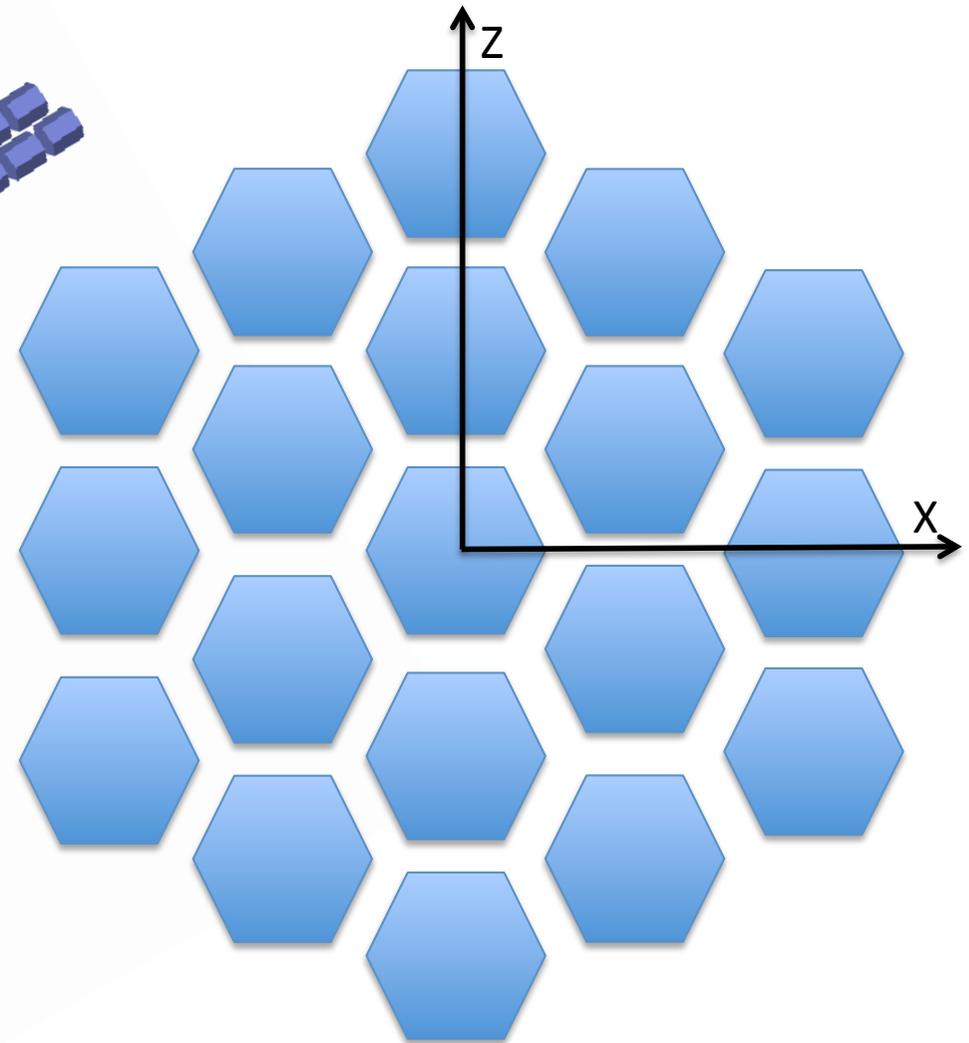
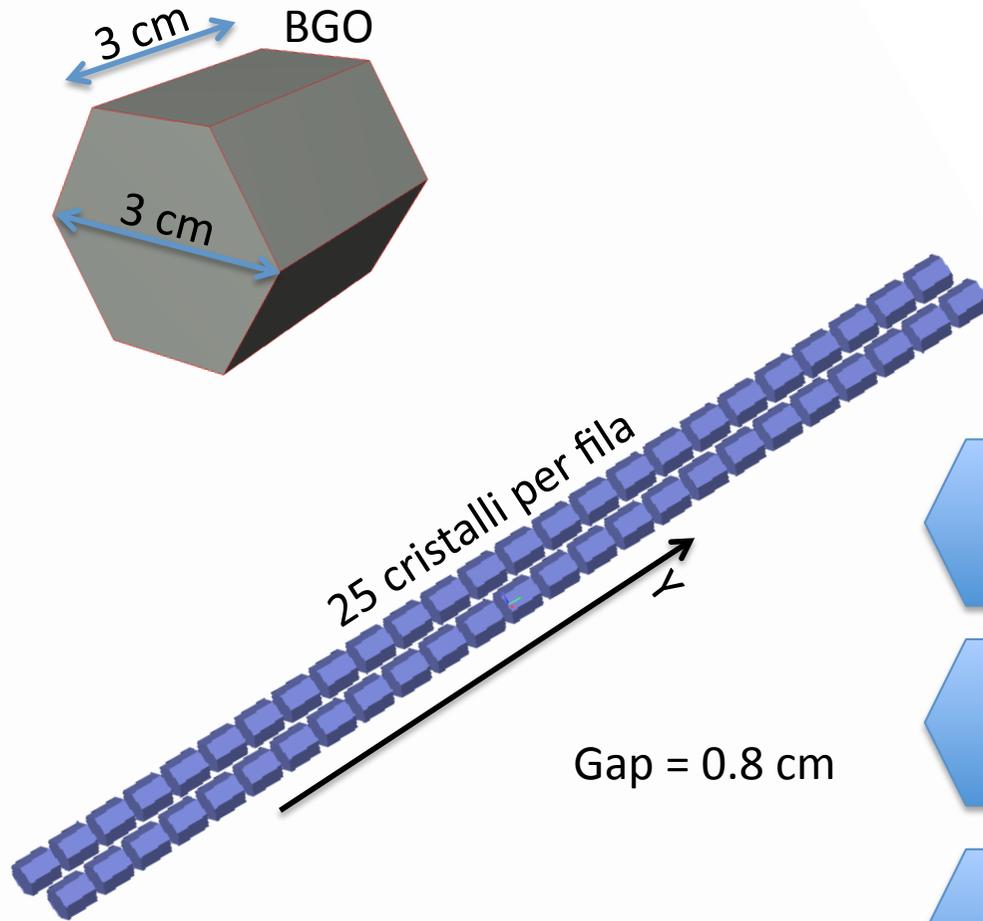


Proton 1 TeV



# CALORIMETRO CILINDRICO

Dimensioni e disposizione  
dei cristalli esagonali

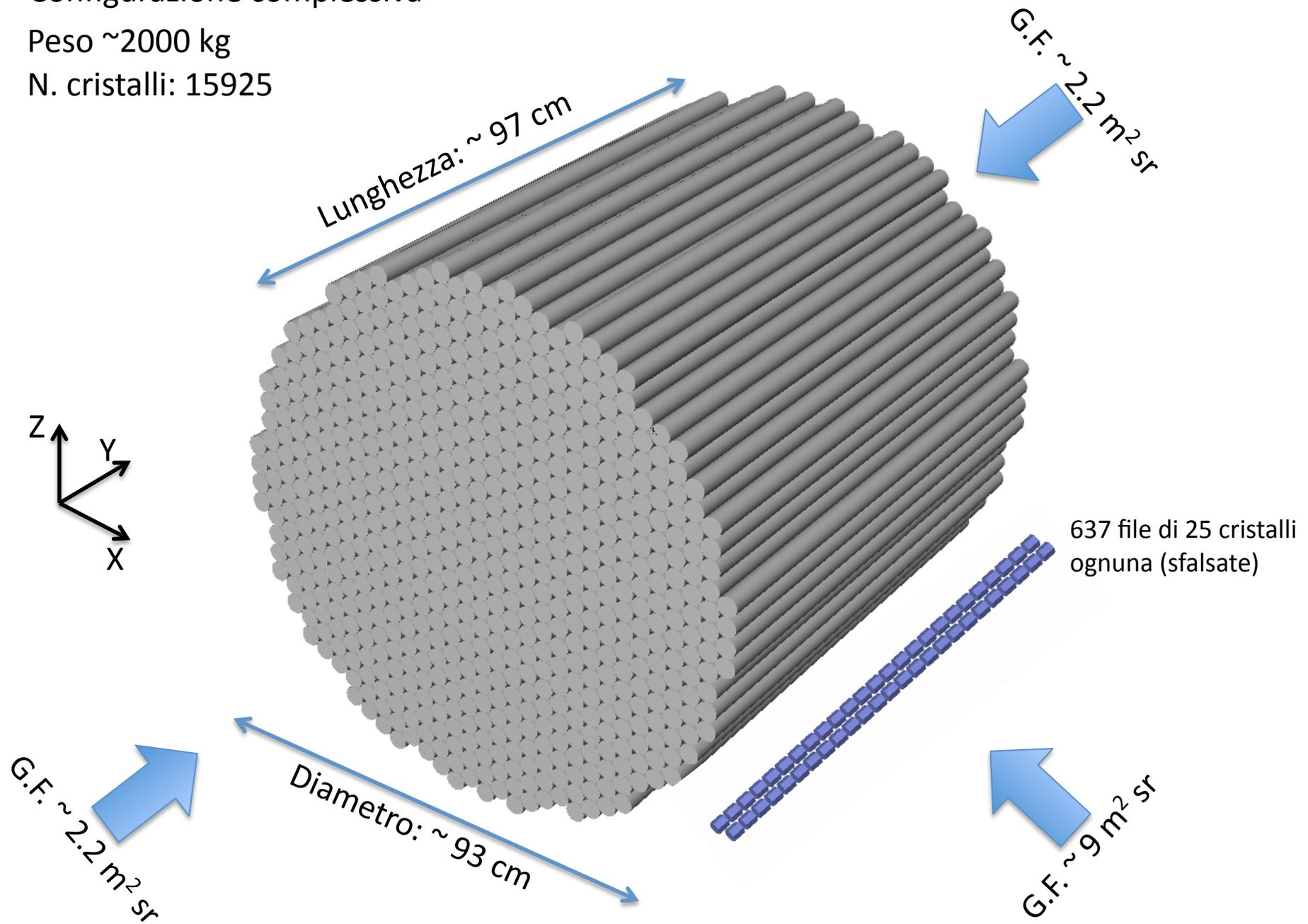


# CALORIMETRO CILINDRICO

Configurazione complessiva

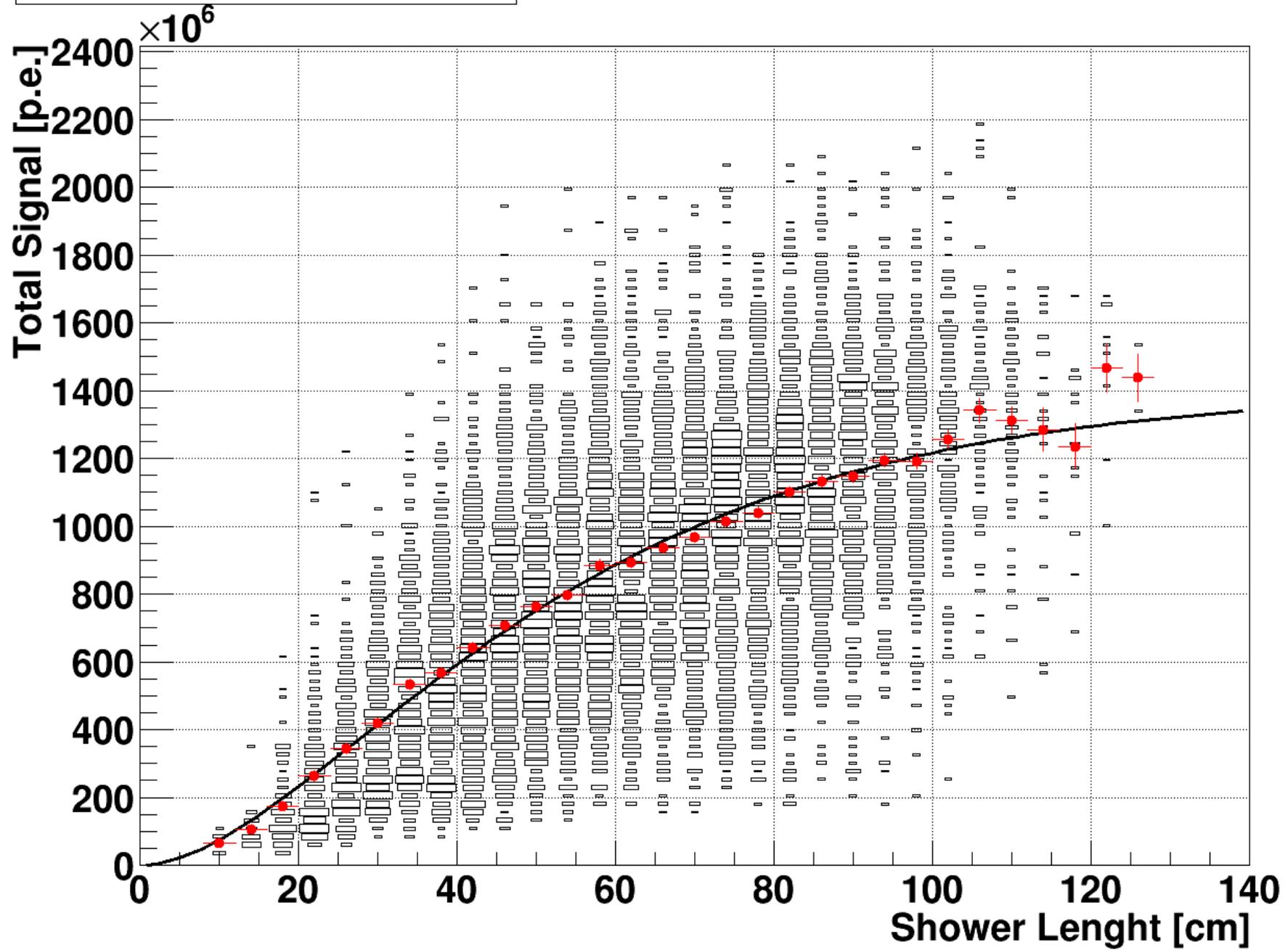
Peso ~2000 kg

N. cristalli: 15925

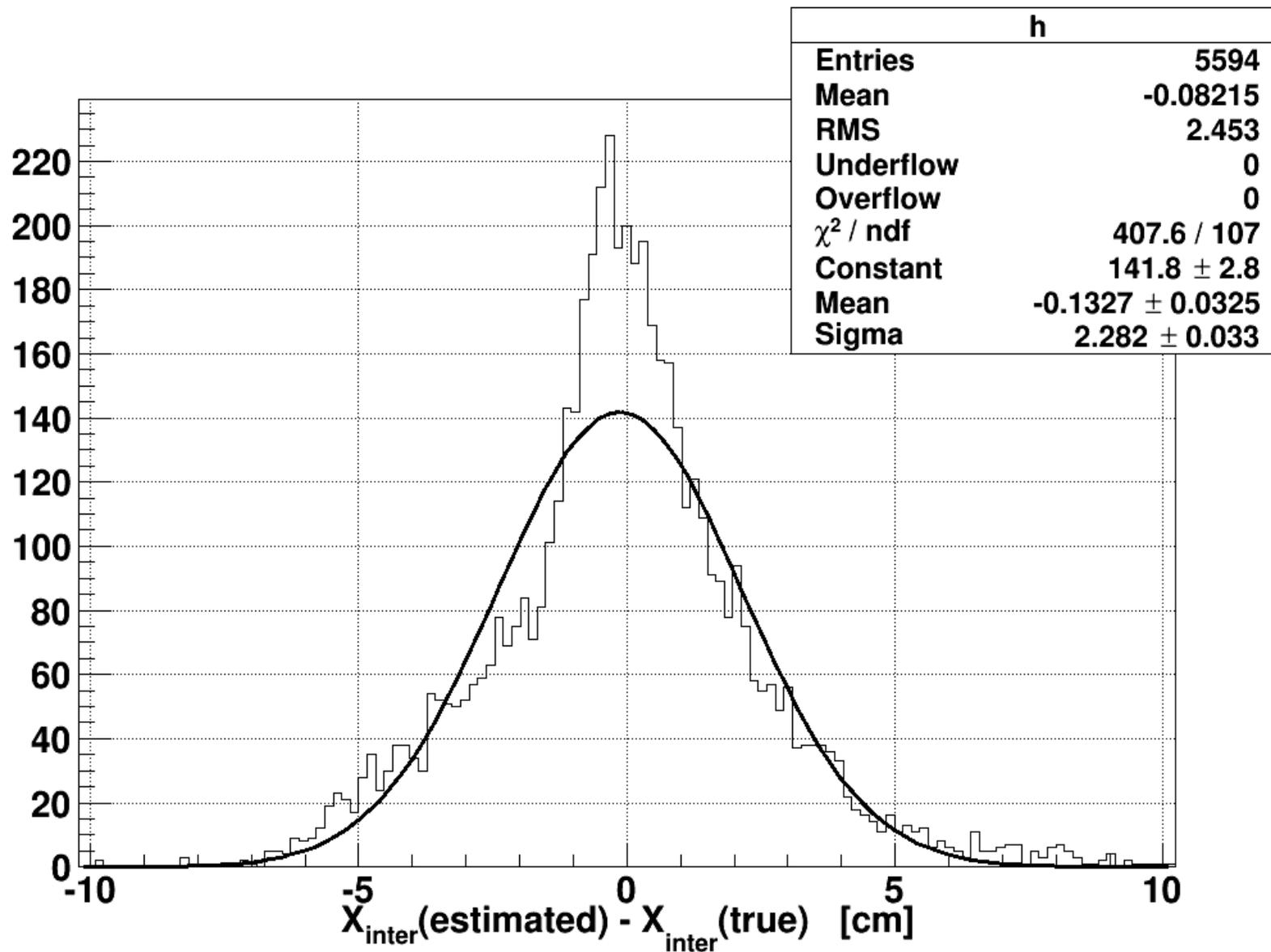


# Signal versus Length

Entries 7958



# Determinazione del punto di interazione a due soglie



Larghezza  $\sim 2.4$  cm

A parità di peso diverse possibilità della configurazione cilindrica (L,D)

