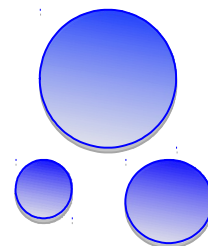
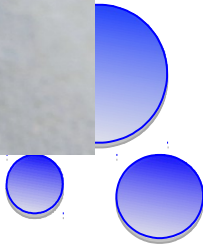
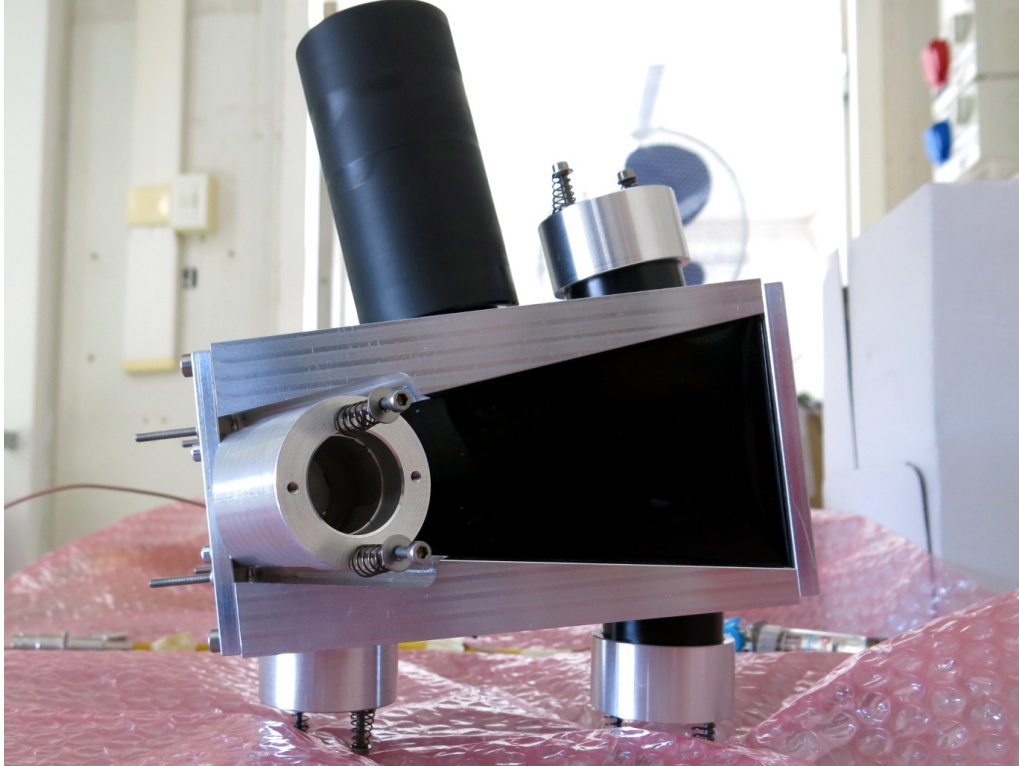


PRT:

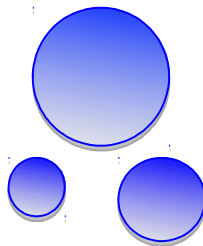
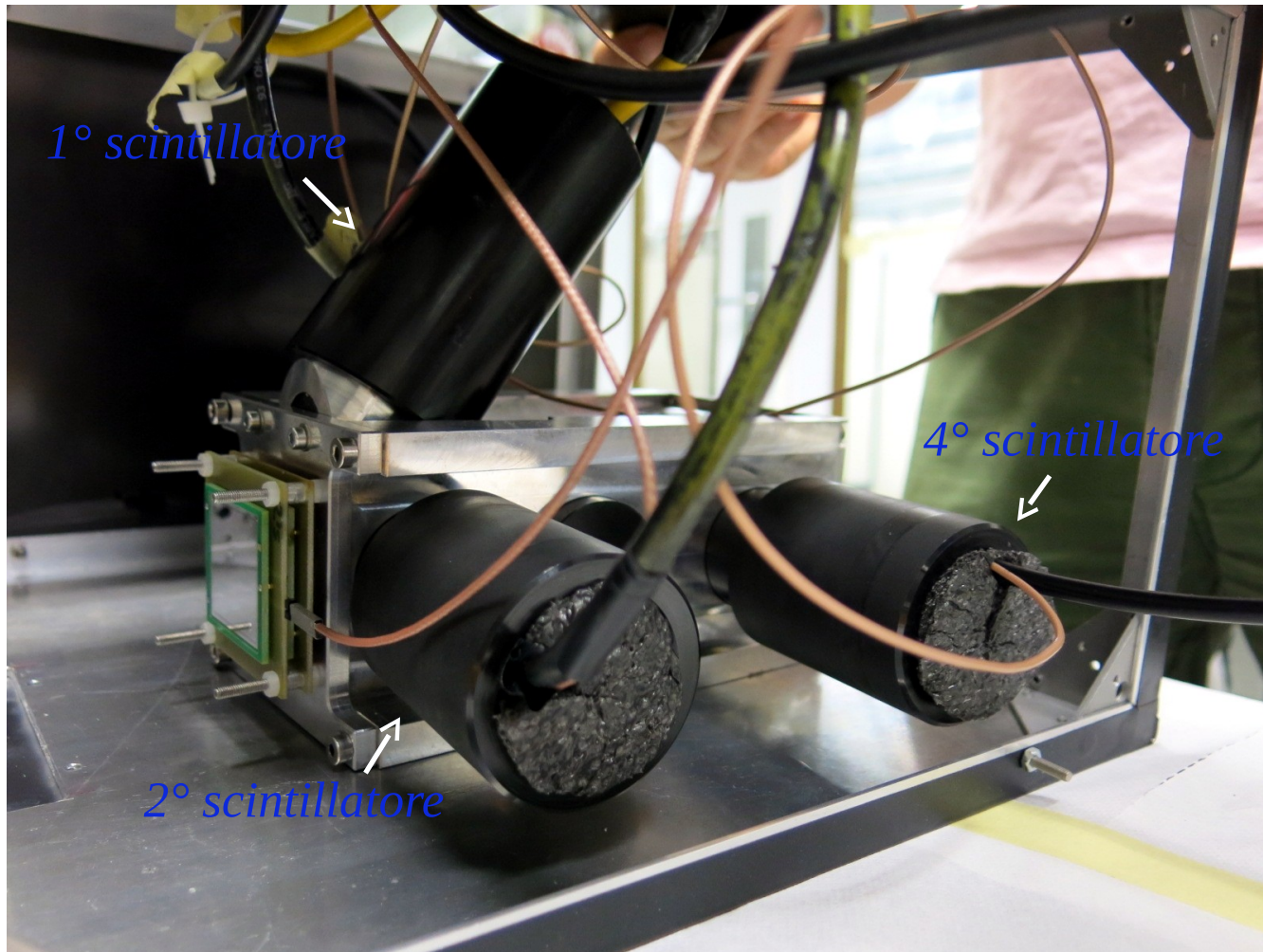
misura e analisi dati



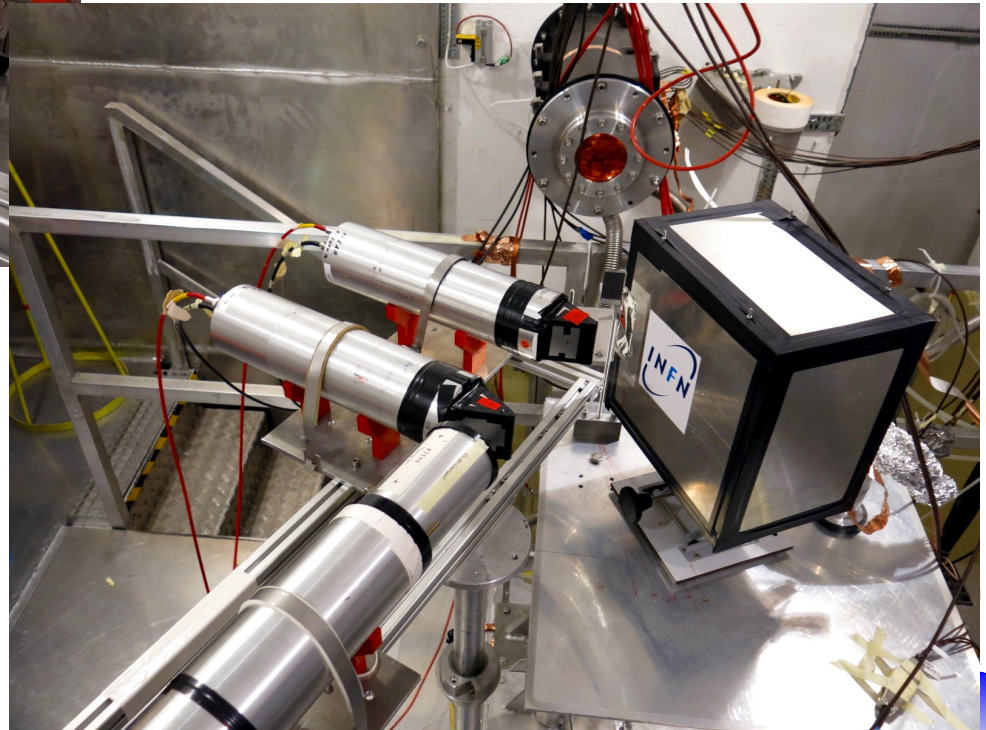
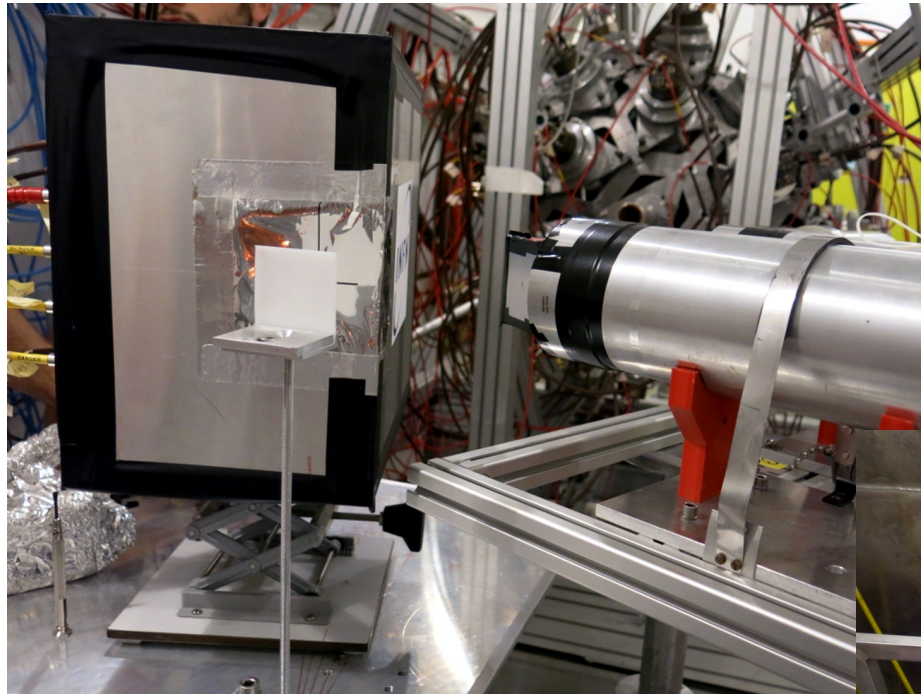
Set-up sperimentale



Set-up sperimentale



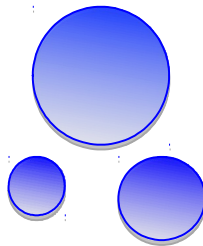
Set-up sperimentale



Configurazioni testate

- Tensioni applicate agli scintillatori: 800 V, 680 V, 700 V, 660 V

	<i>Bersaglio</i>	<i># protoni</i>
20°	2 mm PE	1,2 10¹⁷
	1 mm Carbonio	2,9 10¹⁶
	10 mm PE	1,8 10¹⁷
	5 mm Carbonio	1,5 10¹⁷
	Vuoto	5,8 10¹⁶
30°	2 mm PE	9,8 10¹⁶
	10 mm PE	1,1 10¹⁷
	5 mm Carbonio	6,1 10¹⁶
	4 mm PE	2,5 10¹⁶
	Vuoto	1,9 10¹⁶



Configurazioni testate

- Tutte le tensioni a 900 V:

20° con 2 mm di PE ➡ **$9 \cdot 10^{16}$ protoni**

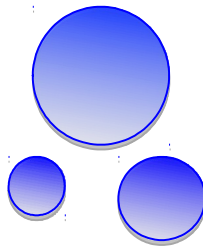
- Tensioni +20%: 960 V, 816 V, 840 V, 792 V:

20° con 10 mm di PE ➡ **$1,4 \cdot 10^{16}$ protoni**

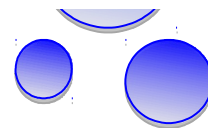
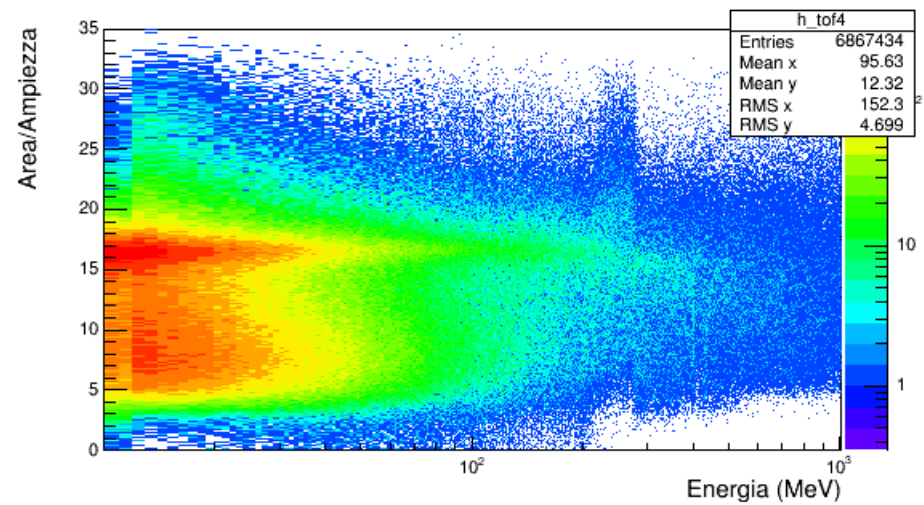
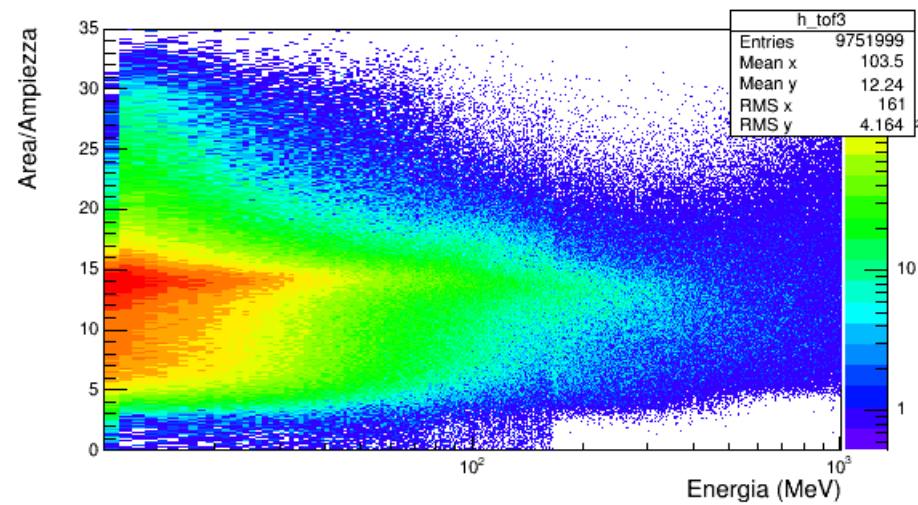
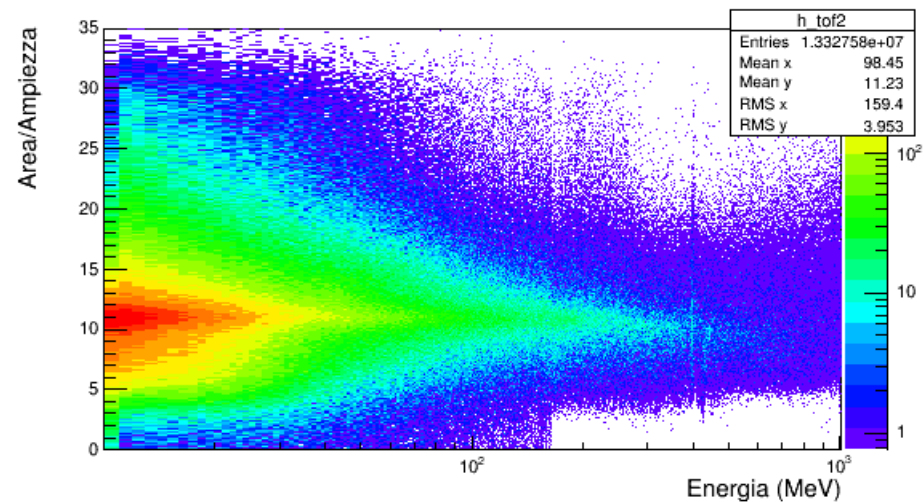
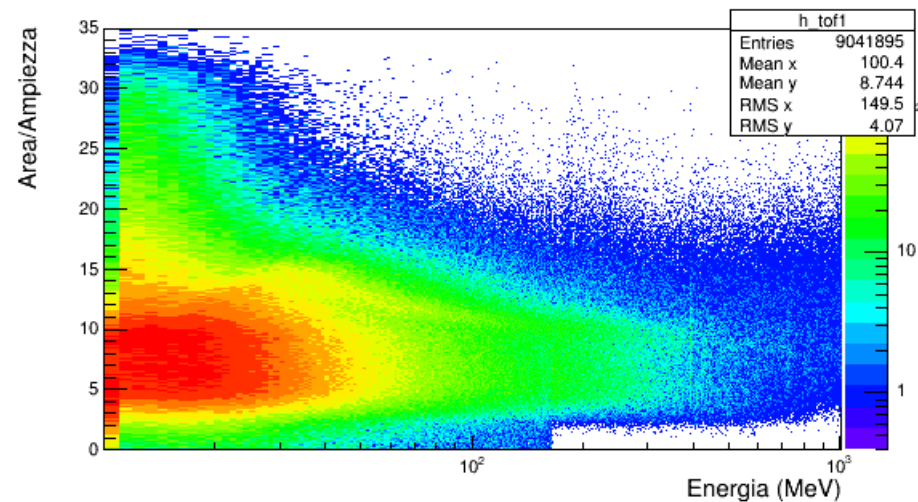
- Finestra carta nera:

20 ° con 10 mm di PE ➡ **$2,4 \cdot 10^{16}$ protoni**

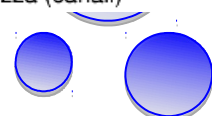
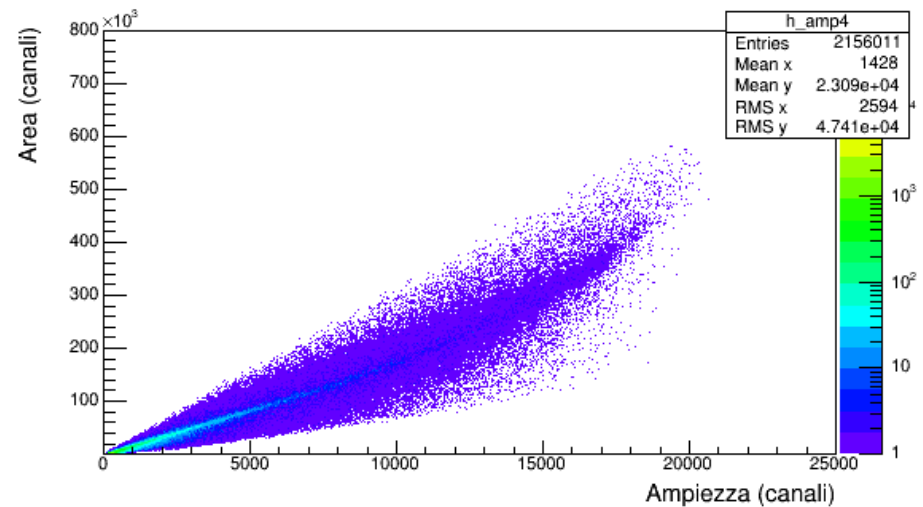
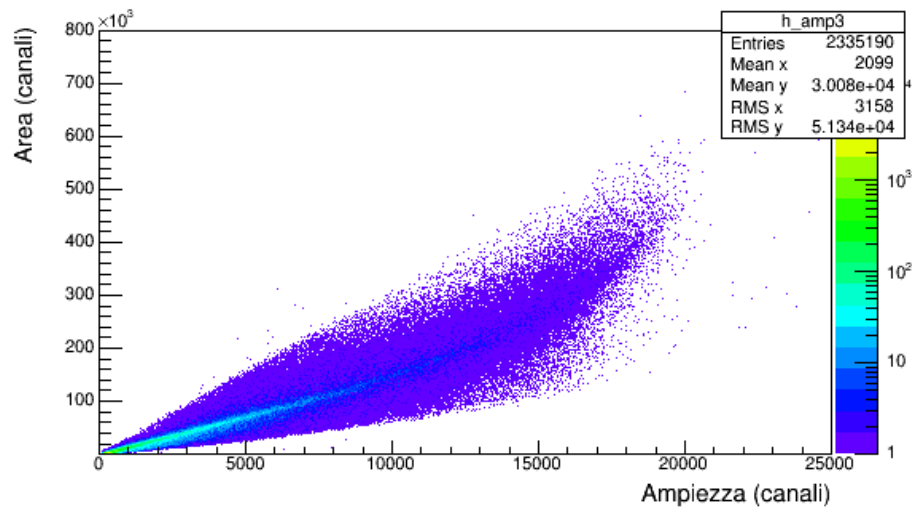
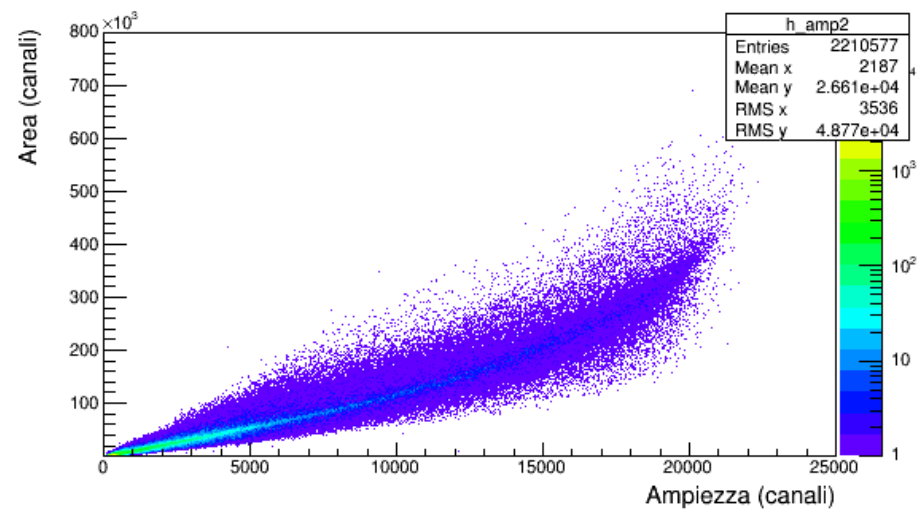
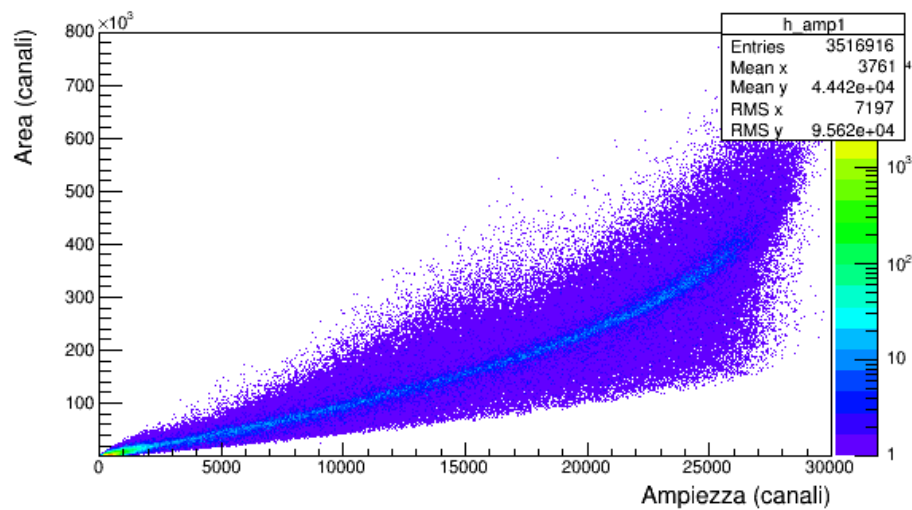
- Calibrazioni con ^{60}Co : **$8,5 \cdot 10^3$ bunches**



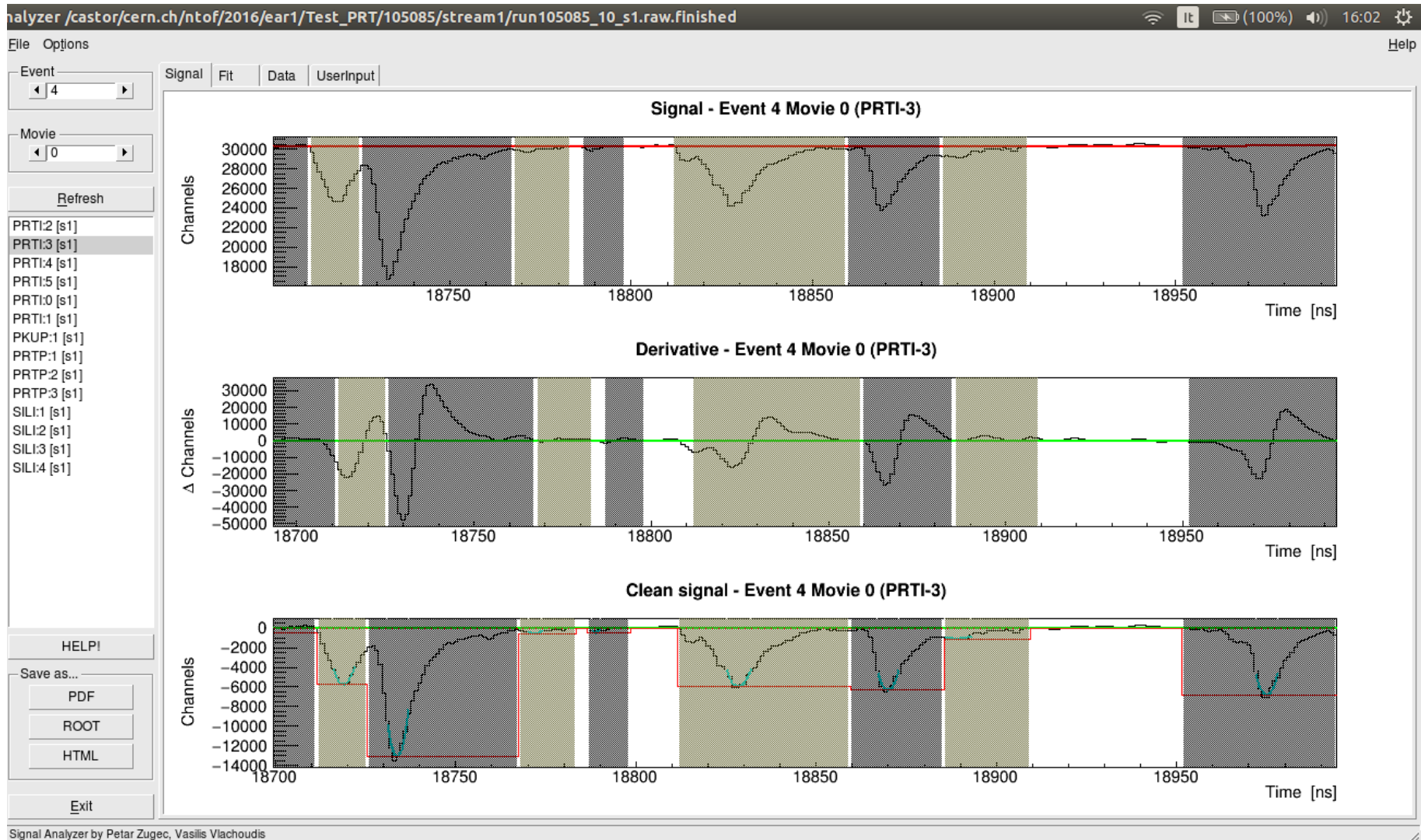
Pulse Shape Analysis



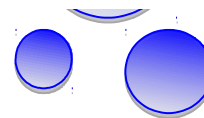
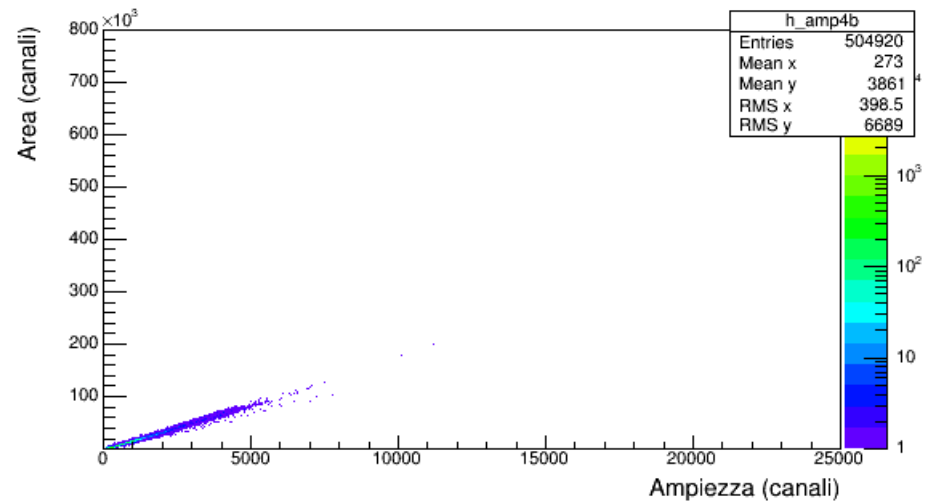
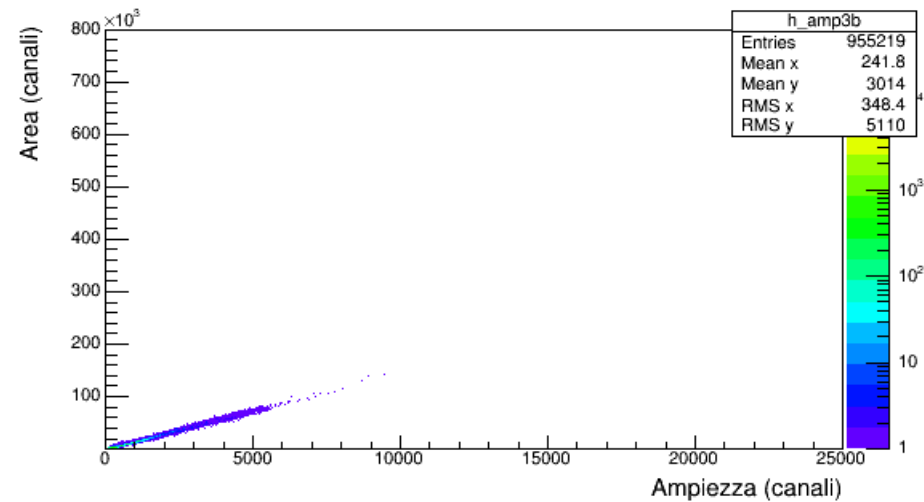
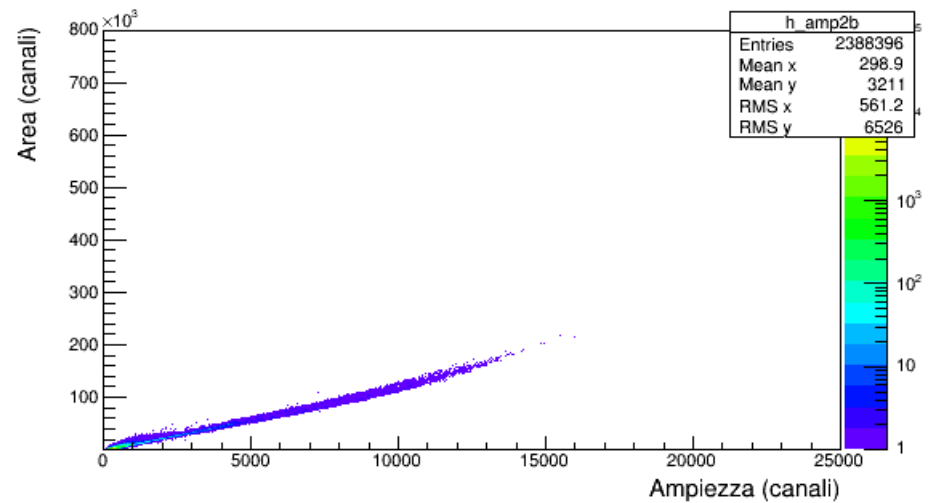
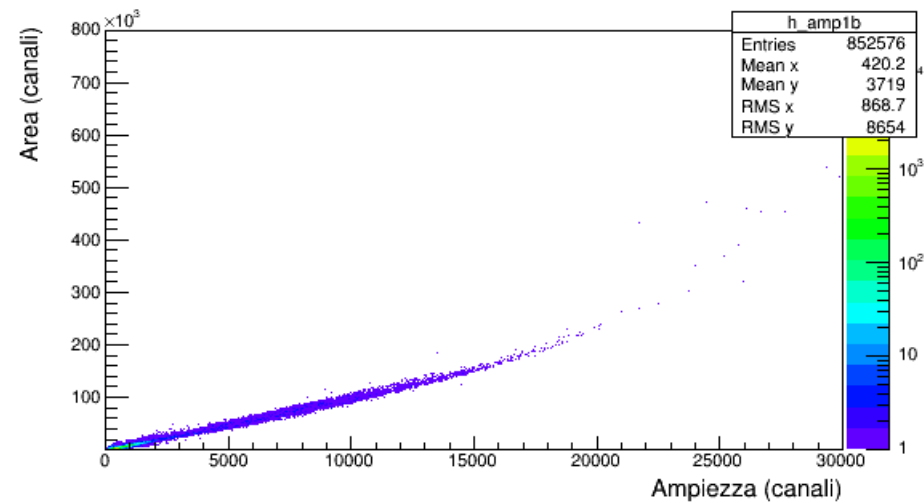
Pulse Shape Analysis



Pulse Shape Analysis



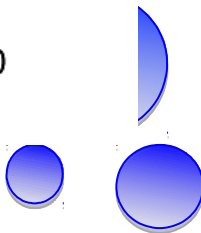
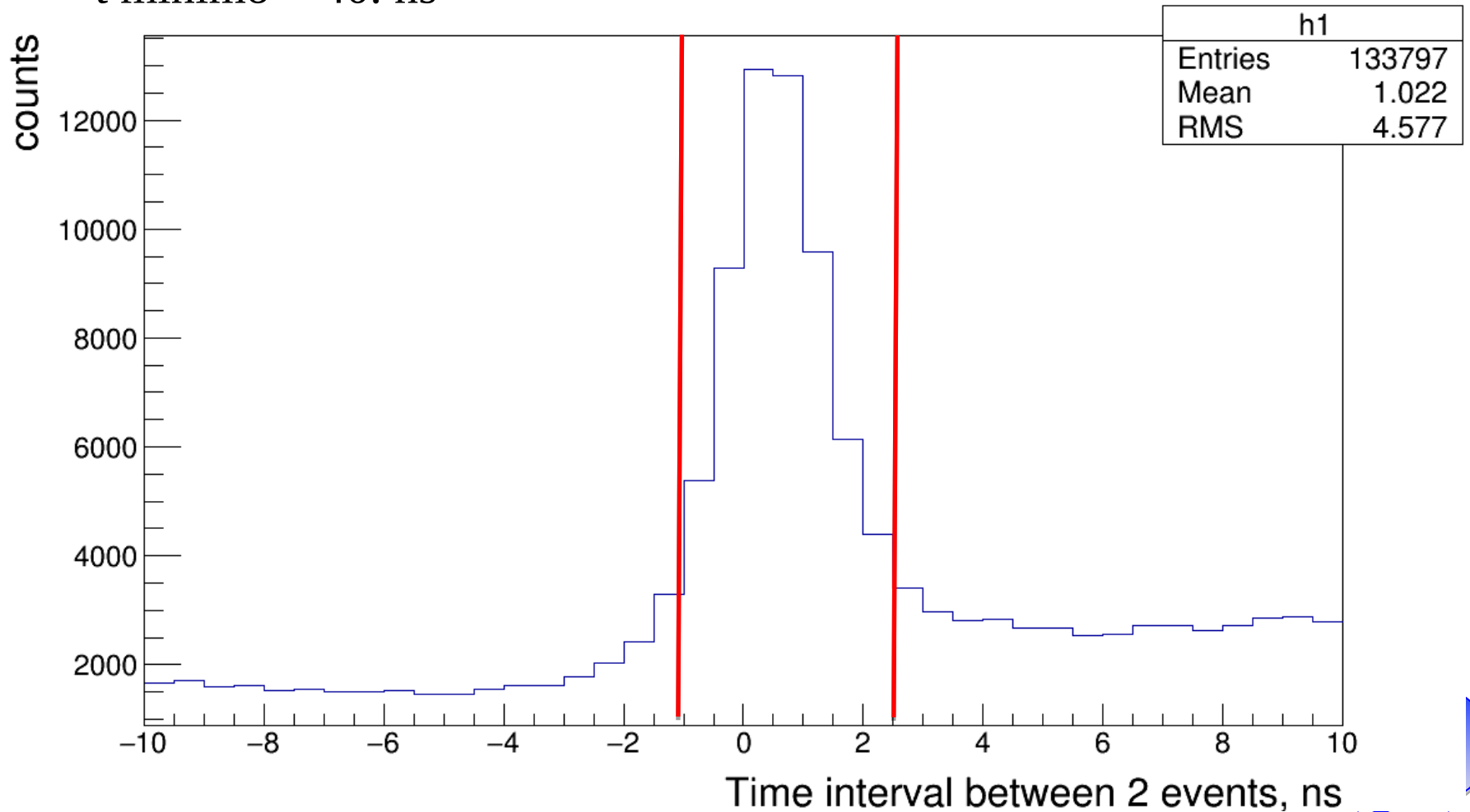
Pulse Shape Analysis



Analisi dati

Ampiezza minima = 3000.

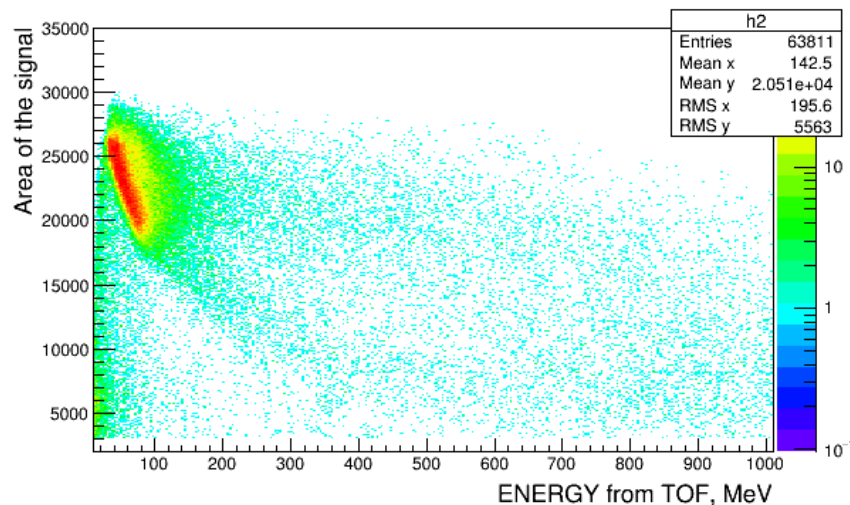
t minimo = 40. ns



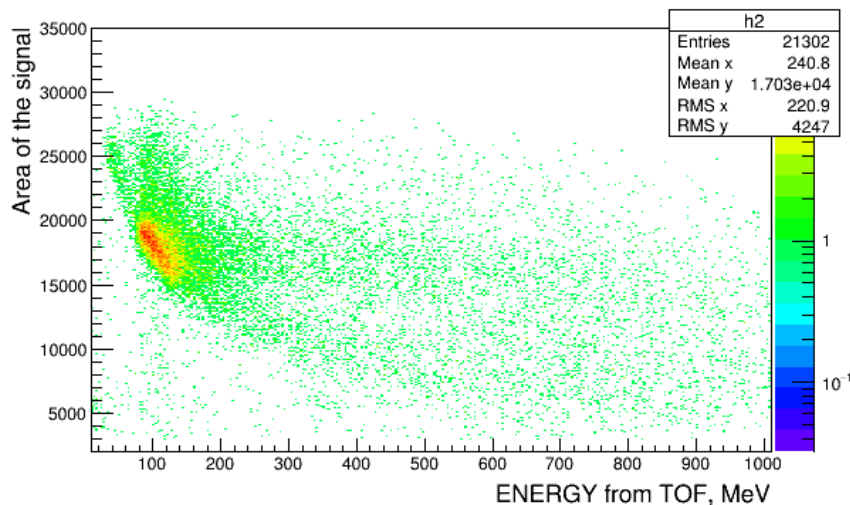
Analisi dati – Polietilene 10 mm

Scintillatore 1

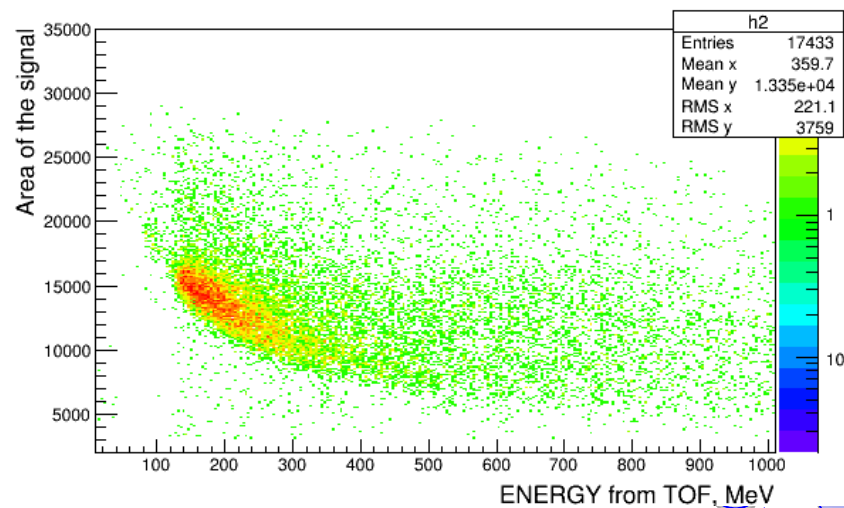
Coincidenza 1-2



Coincidenza 1-2-3



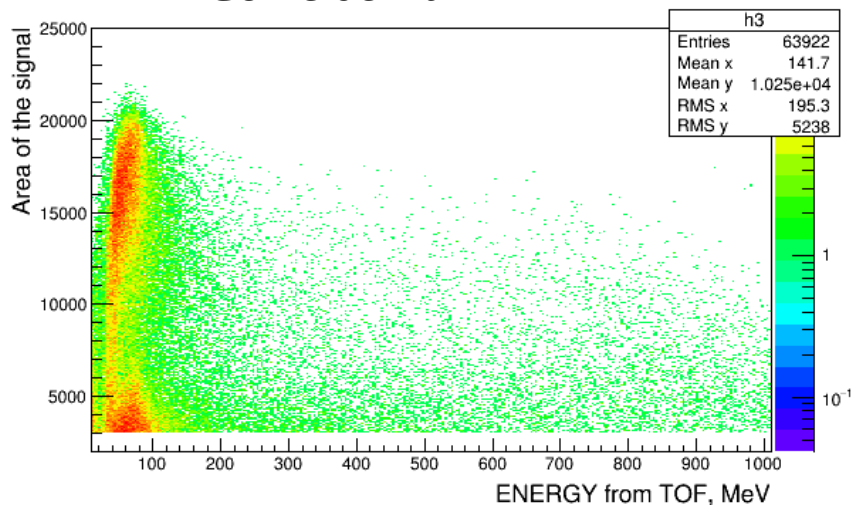
Coincidenza 1-2-3-4



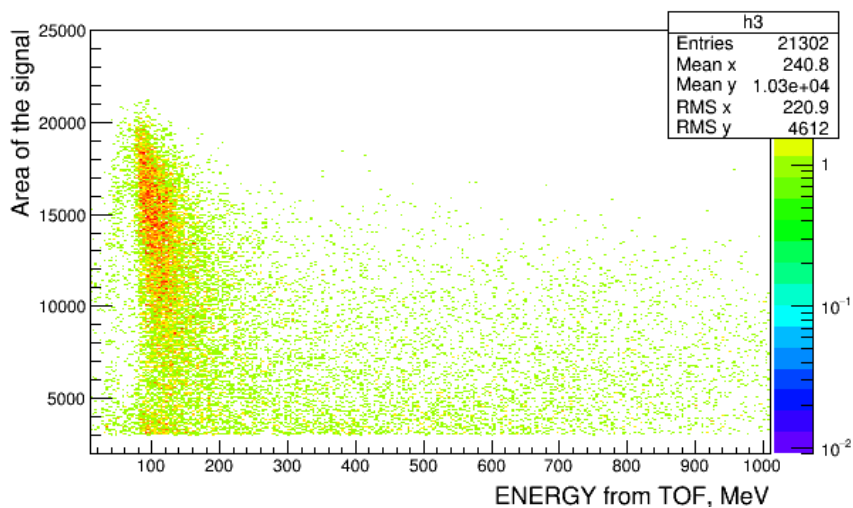
Analisi dati – Polietilene 10 mm

Scintillatore 2

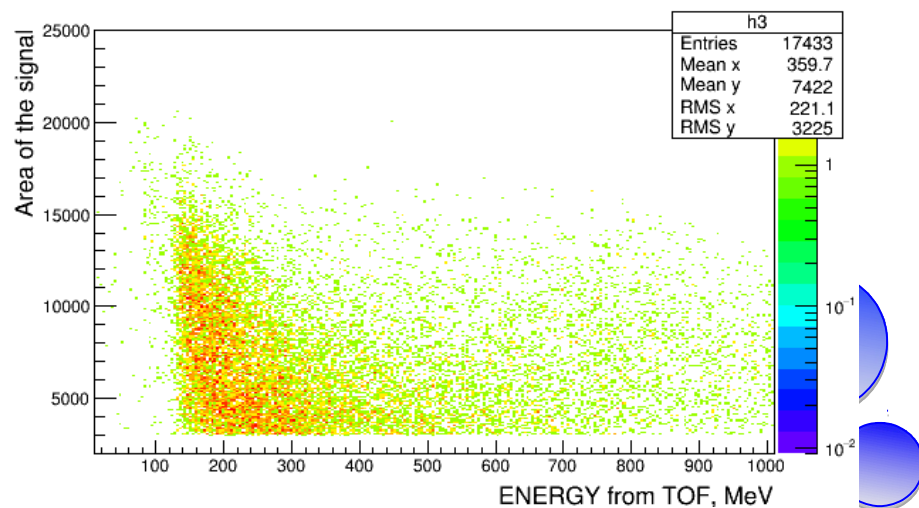
Coincidenza 1-2



Coincidenza 1-2-3



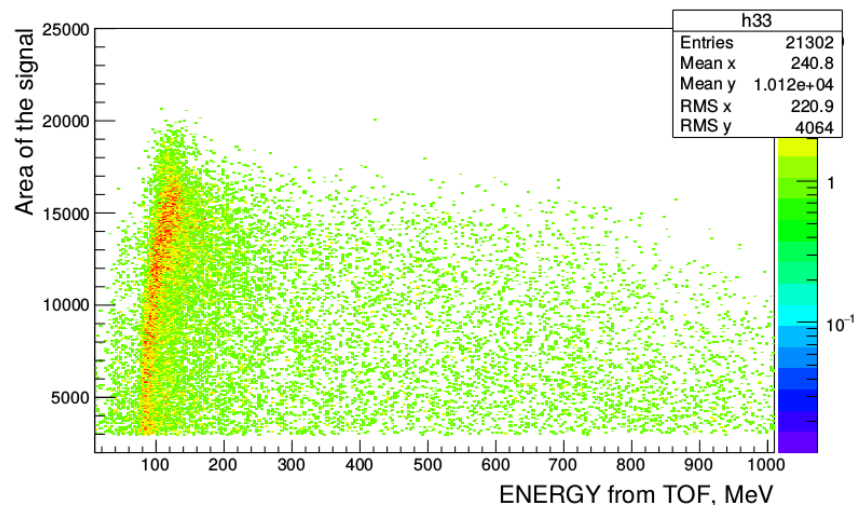
Coincidenza 1-2-3-4



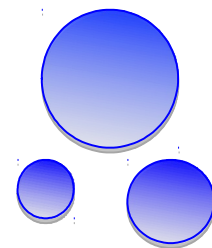
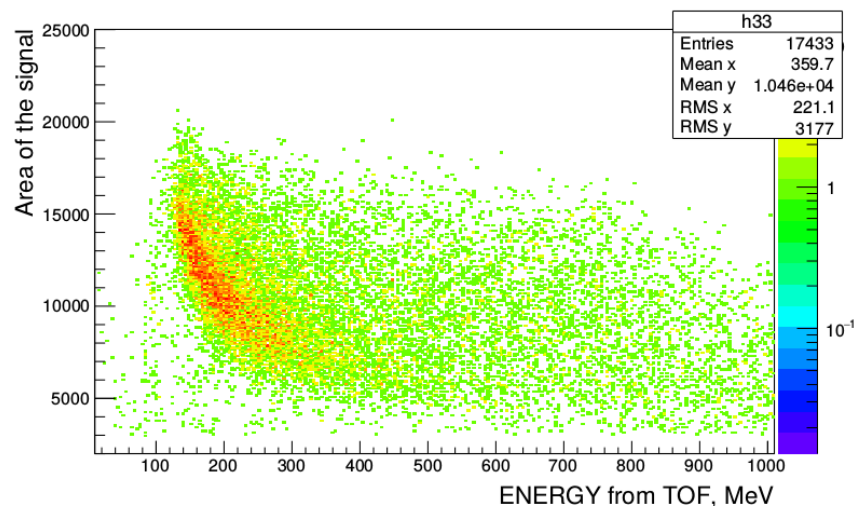
Analisi dati – Polietilene 10 mm

Scintillatore 3

Coincidenza 1-2-3



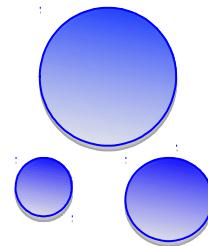
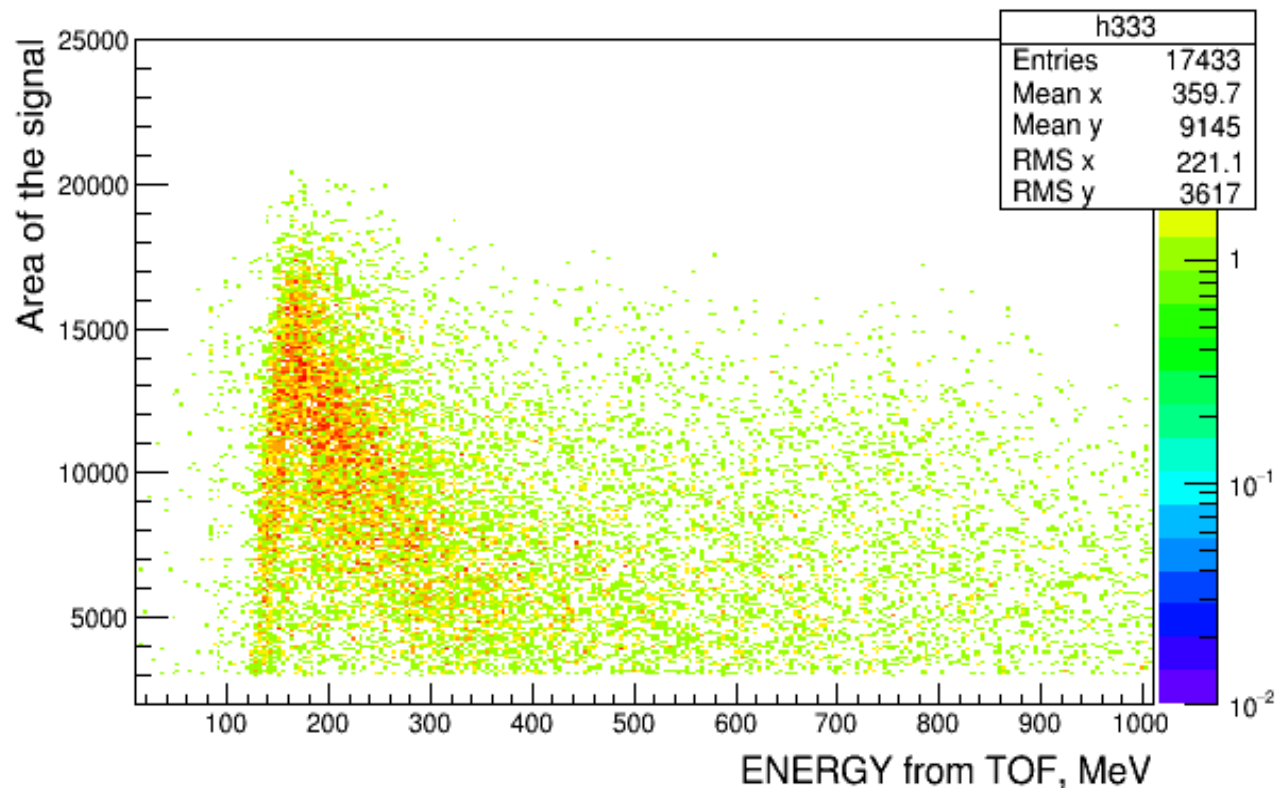
Coincidenza 1-2-3-4



Analisi dati – Polietilene 10 mm

Scintillatore 4

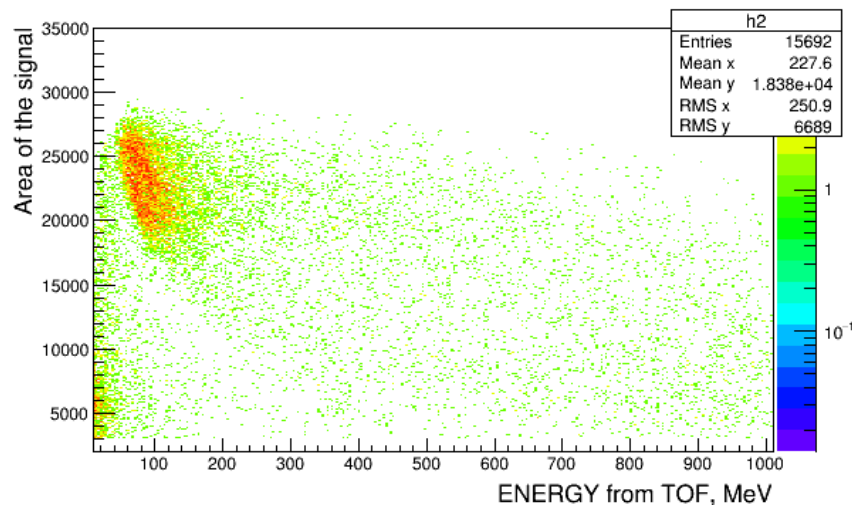
Coincidenza 1-2-3-4



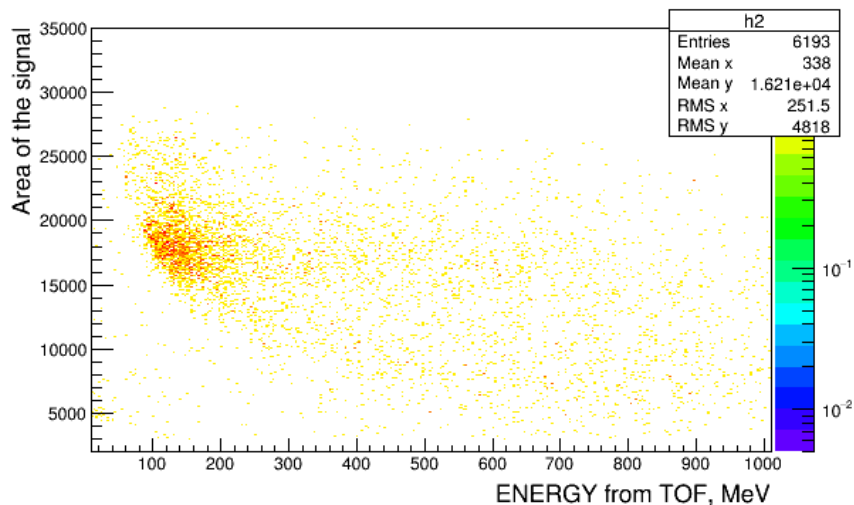
Analisi dati – Carbonio 5 mm

Scintillatore 1

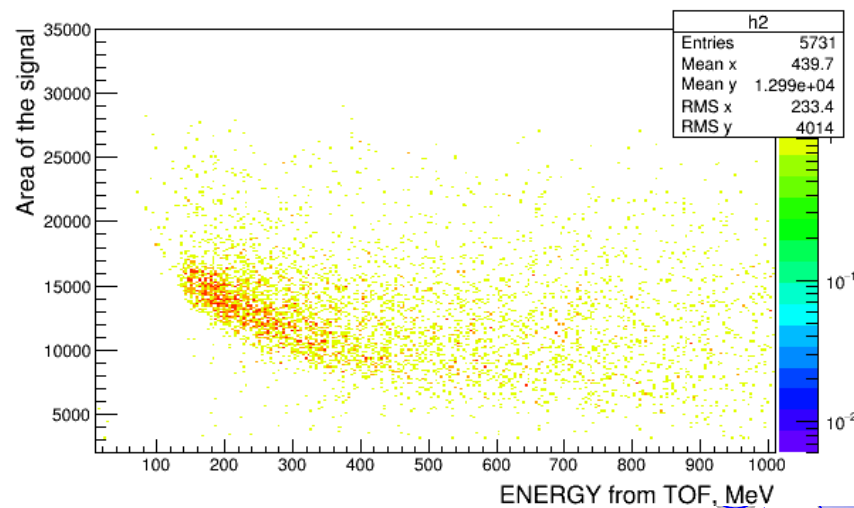
Coincidenza 1-2



Coincidenza 1-2-3



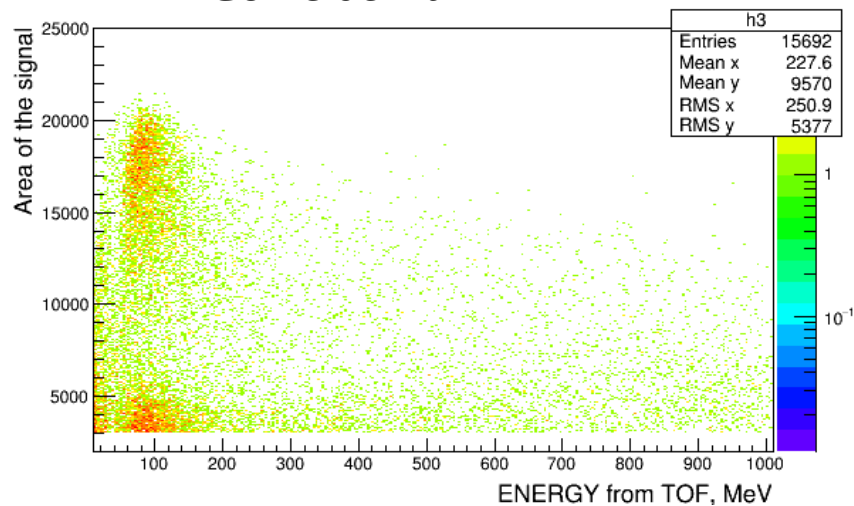
Coincidenza 1-2-3-4



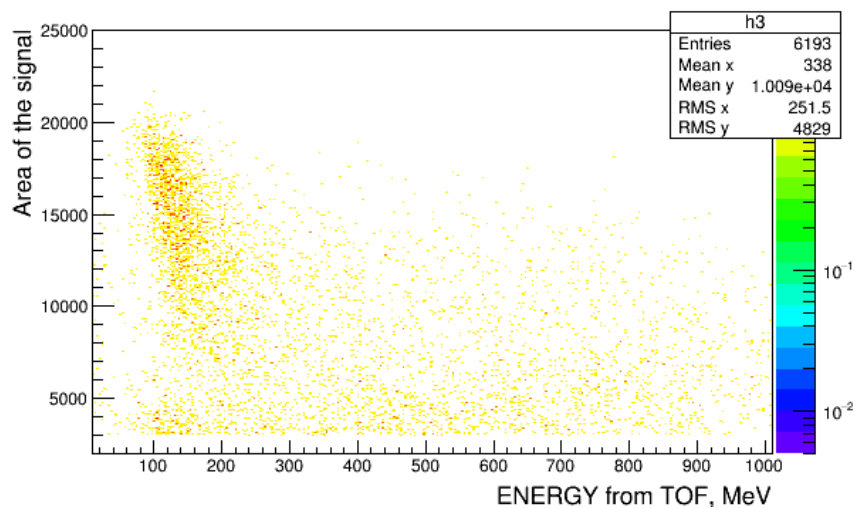
Analisi dati – Carbonio 5 mm

Scintillatore 2

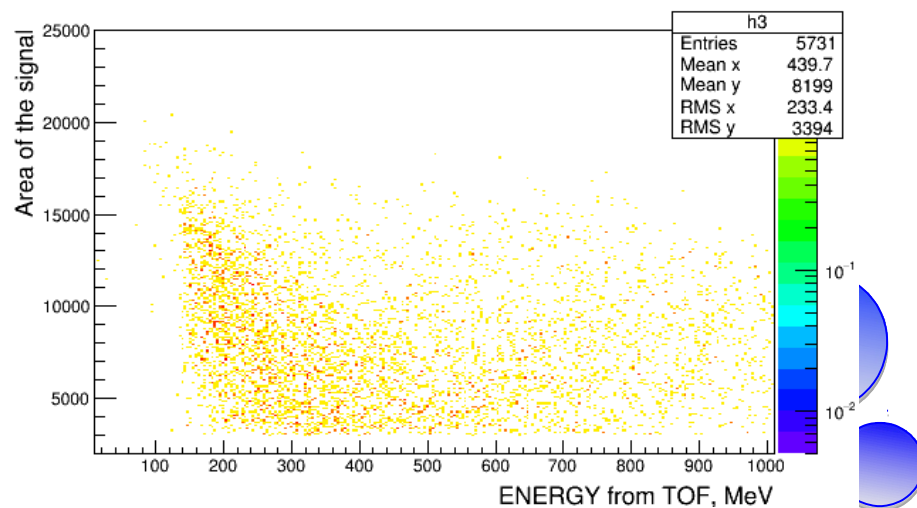
Coincidenza 1-2



Coincidenza 1-2-3



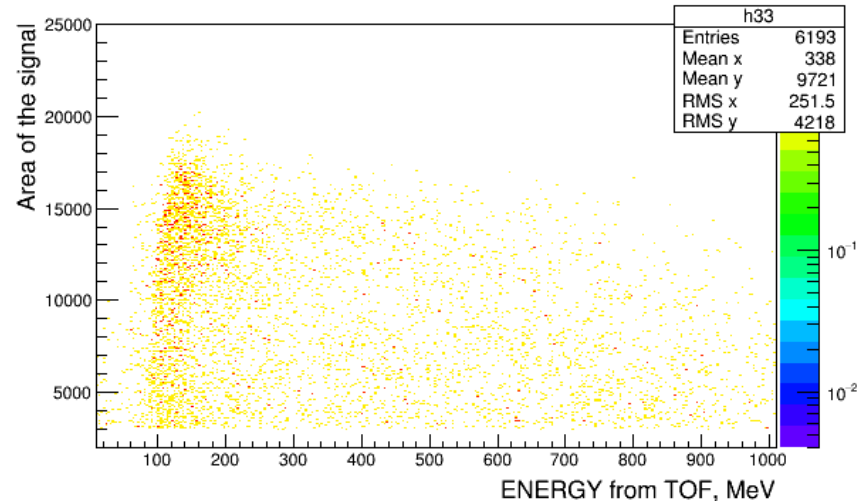
Coincidenza 1-2-3-4



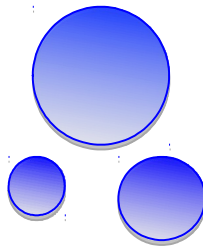
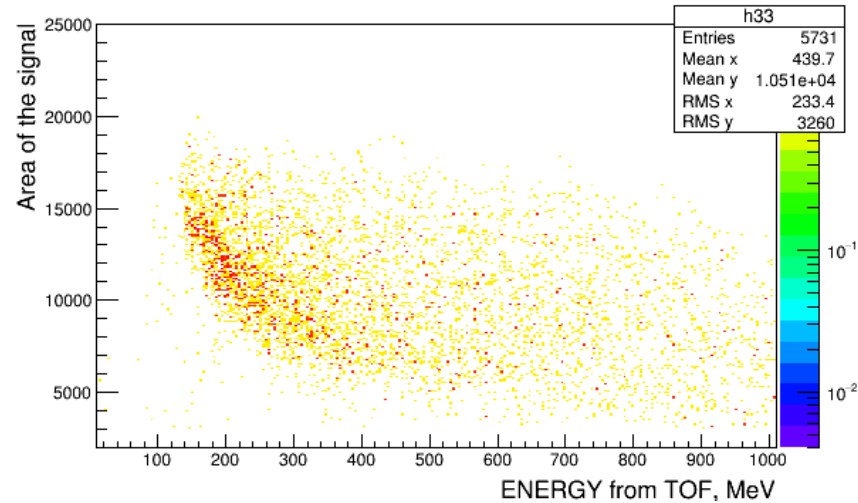
Analisi dati – Carbonio mm

Scintillatore 3

Coincidenza 1-2-3



Coincidenza 1-2-3-4



Analisi dati – Carbonio 5 mm

Scintillatore 4

Coincidenza 1-2-3-4

