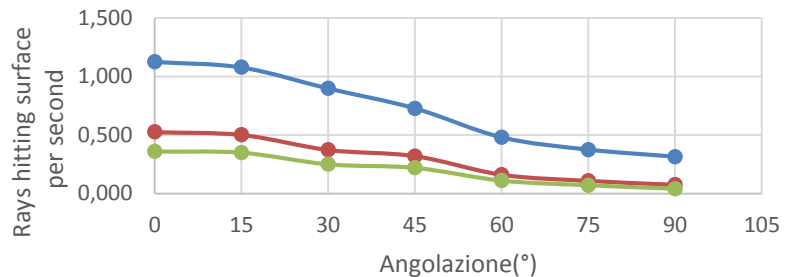


ANGULAR DISTRIBUTION OF COSMIC RAYS

Liceo Scientifico Statale "G. C. Vanini",
Casarano

During the 6th edition of the International Cosmic Day seven students from G.C. Vanini high school attended a conference and a laboratory experience in Lecce. After a theoretical introduction, we tried by ourselves to measure the rate of cosmic rays as a function of the zenith angle. Moreover, we collected the data acquired from each measuring session in a plot chart to facilitate the readability of the results.

The moun signal was recorded through a suitable detector and then computer-processed. The count rates, taken every ten minutes, were acquired as a function of the angle.



	x	y	z	w	xy	yz	zw	xyz	yzw	xyzw
0°	38,04	31,93	30,14	34,33	12,08	10,88	10,82	6,338	4,18	3,6
15°	37,7	33,098	31,4	34,88	10,72	10,83	10,8	6,016	4,016	3,5
30°	37,56	31,54	30,23	33,57	9,22	8,661	9,07	4,633	2,83	2,5
45°	33,89	28,14	26,59	33,64	7,531	7,093	7,218	3,75	2,656	2,2
60°	30,51	26,21	26,01	34,22	4,79	4,71	4,9	2	1,22	1,1
75°	29,45	24,04	24,57	32,04	3,593	3,859	3,796	1,406	0,765	0,7
90°	29,21	24,828	23,32	31,79	3,156	3,14	3,14	1,046	0,453	0,41



This beautiful experience allowed us to understand the way cosmic rays work.



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