COUNTER STUDIES OF HARD COMPONENT OF COSMIC RAYS

by

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B.Sc.(Hons.), Chulalongkorn University, 1963

Thesis

Submitted in partial fulfillment of the requirements for the

Degree of Master of Science

in

The Chulalongkorn University Graduate School

Department of Physics

March, 1965

(B.E. 2508)

Accepted by the Graduate School, Chulalongkorn University in partial fulfillment of the requirements for the Degree of Master of Science.

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Date.30th March 1965

ABSTRACT

The hard component of cosmic rays at latitude 13°46'(N) was detected by using three-fold coincidence G.M. counter. Attempts were made to determine the thickness of lead absorber and study the circuits for such a method. The three-fold coincidence circuit was used with two trains of G.M. tubes, which were set horizontally and parallel to the magnetic meridian. The three-fold coincidence count rates were recorded by scaler and recorder. At the same time two-fold coincidence between the upper and the lower tubes was counted by another scaler for determining the efficiency of the circuits. The count rates were corrected for barometer, temperature effect, showers and accidental counts. The results at ground level at latitude 13°46' (N) were in agreement with those of other workers. The hard component was also found to be 70% of the total intensity. The diurnal variation of the hard component was also measured.

ACKNOWLEDGEMENT

The author wishes to express his sincere appreciation to Professor Charoen Dharmaphanija and Mr. Vichitnarong Buggakupta for their advice and guidance given throughout the course of research, and to Dr. Sippanondha Ketudat for giving helpful suggestion. The author is also indebted for the financial support given by the National Research Council of Thailand. It should also be mentioned that the author is indebted to Professor Peng Somanabhandhu, Head of the Physics Department for his interest in the subject.

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