

## A Three-dimensional Monte Carlo Calculation of the Photon initiated Showers and Kiel Result

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### abstract

The Kiel experimental results indicate an existence of the ultra high-energy gamma-rays coming from Cyg. X-3. However the result indicates that the number of the muons included in the photon initiated shower is the same as the number included in the proton initiated showers. According to our Monte Carlo calculation as shown in the graph of underpart, the number of muons included in the photon initiated showers should be less than 1/15 of the proton's [See also Proceed. 17th ICRC 7 (1983),54.].

The previous simulation was made under one dimensional approximation. This time we report the result of three dimensional calculation by oral and ICRR preprint.

