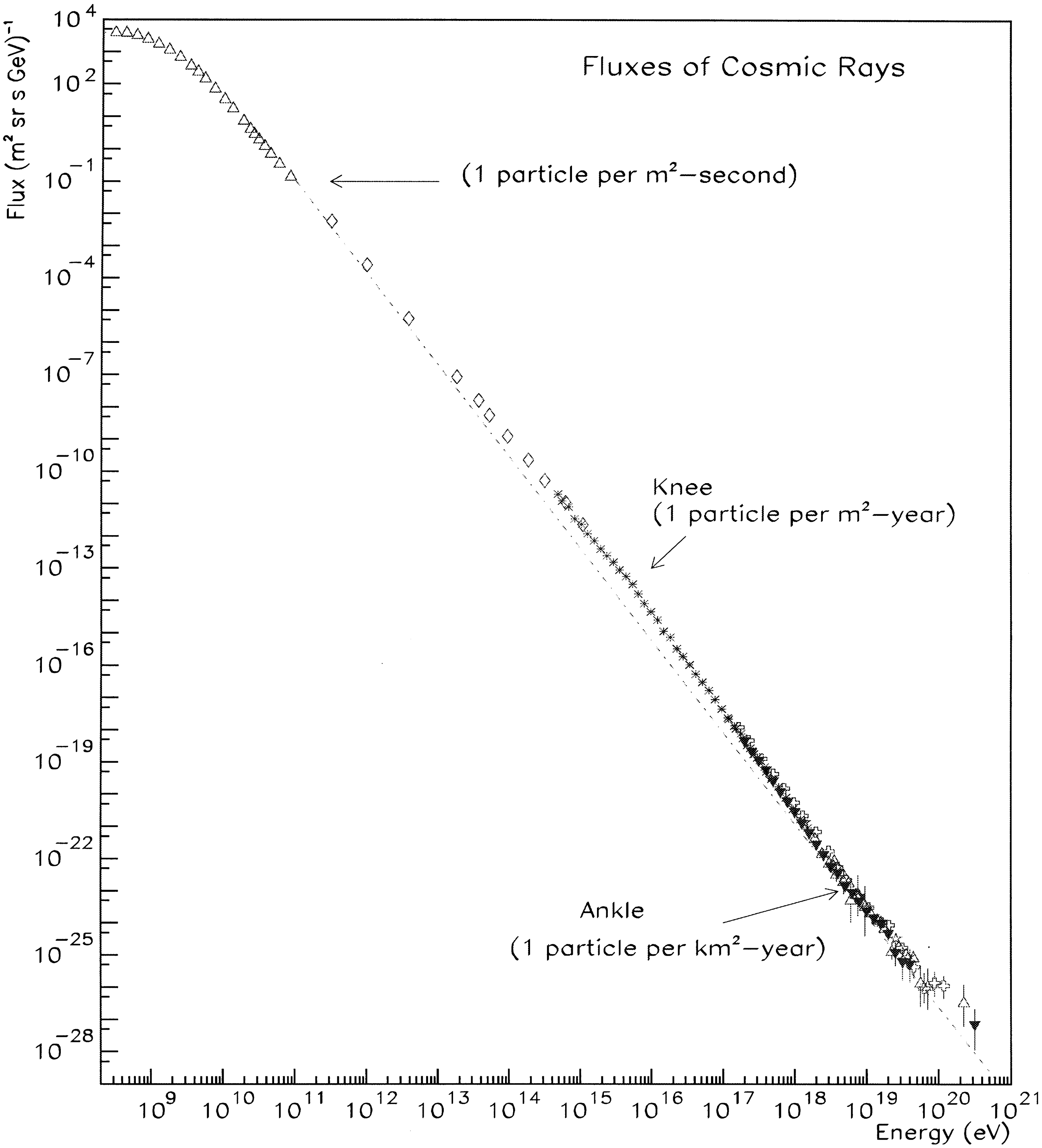

Figure 1: The differential cosmic ray hadron flux at the top of the atmosphere.

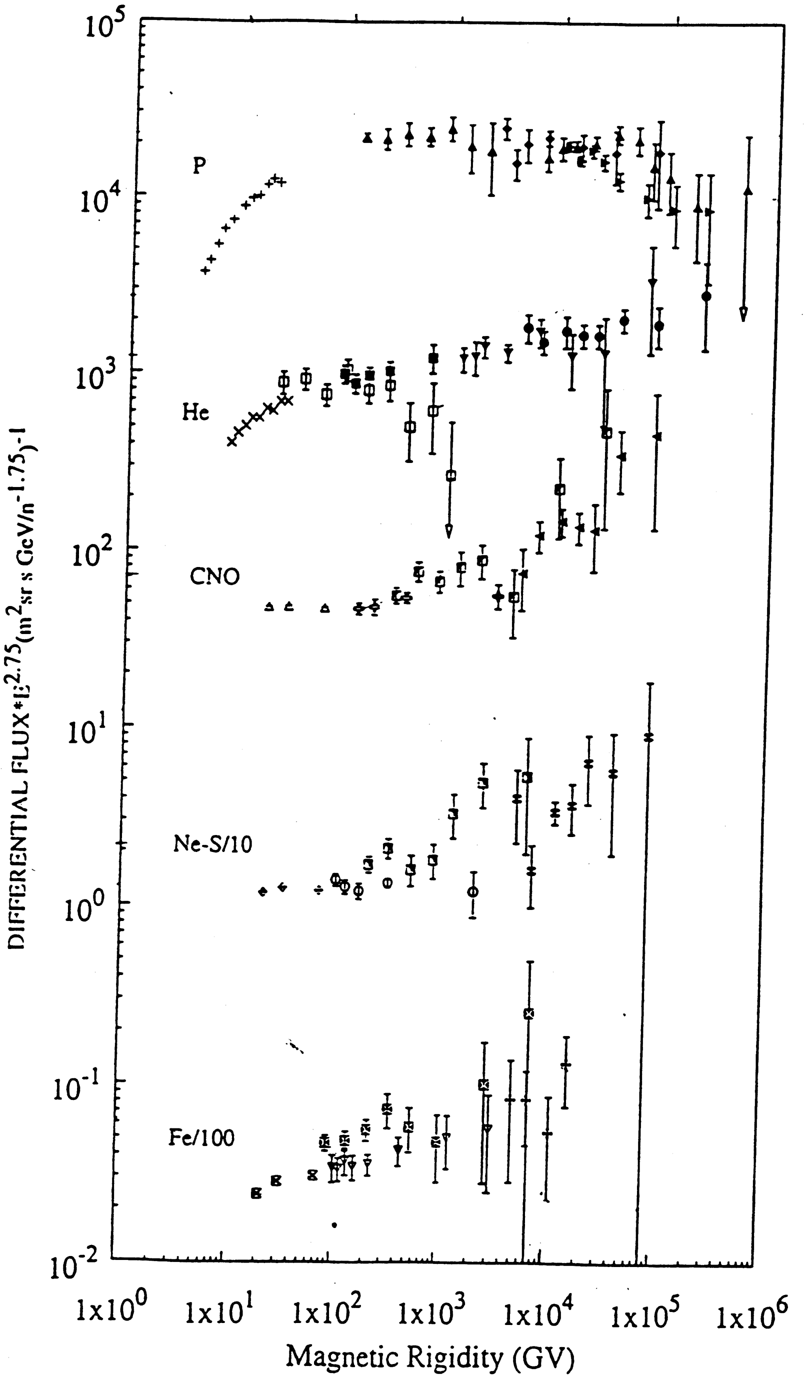

Figure 2: The charge composition of primary cosmic rays vs. magnetic rigidity (momentum/charge) ordered into three groups of elements heavier than He; data taken from the JACEE collaboration [2].

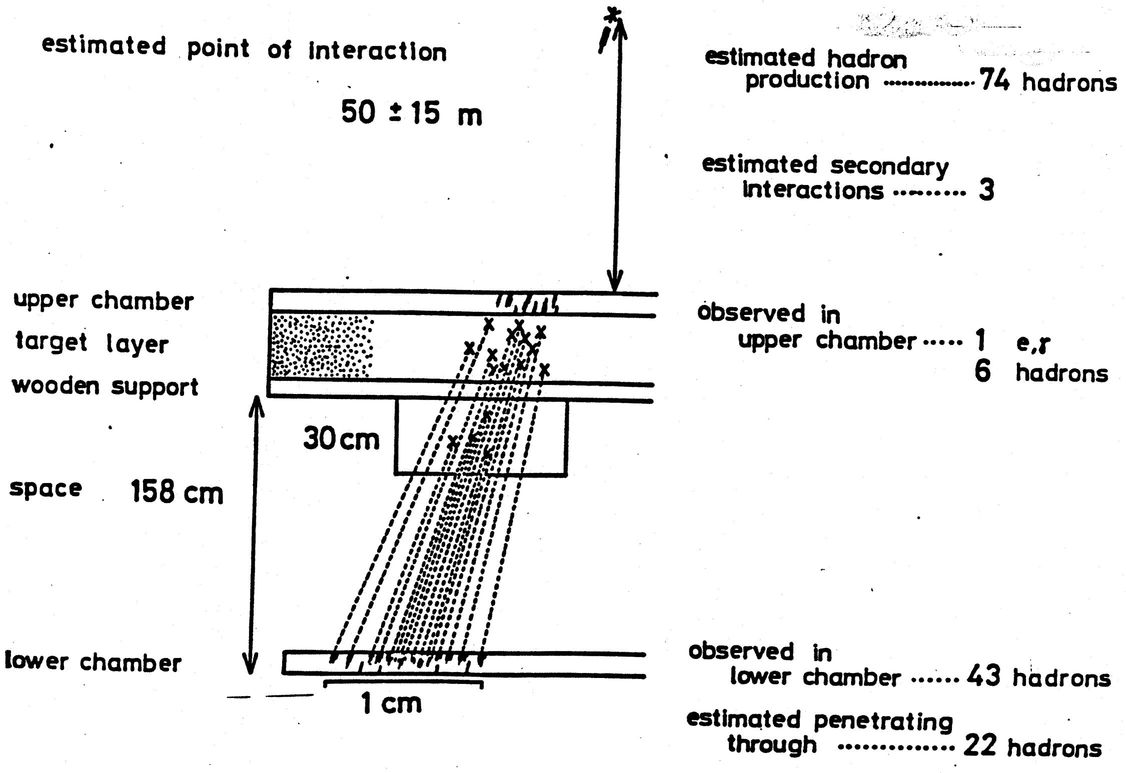

Figure 3: The Centauro I event, as reported by the Brazilian-Japanese collaboration [5]. Note the 100:1 ratio of horizontal to vertical scales.

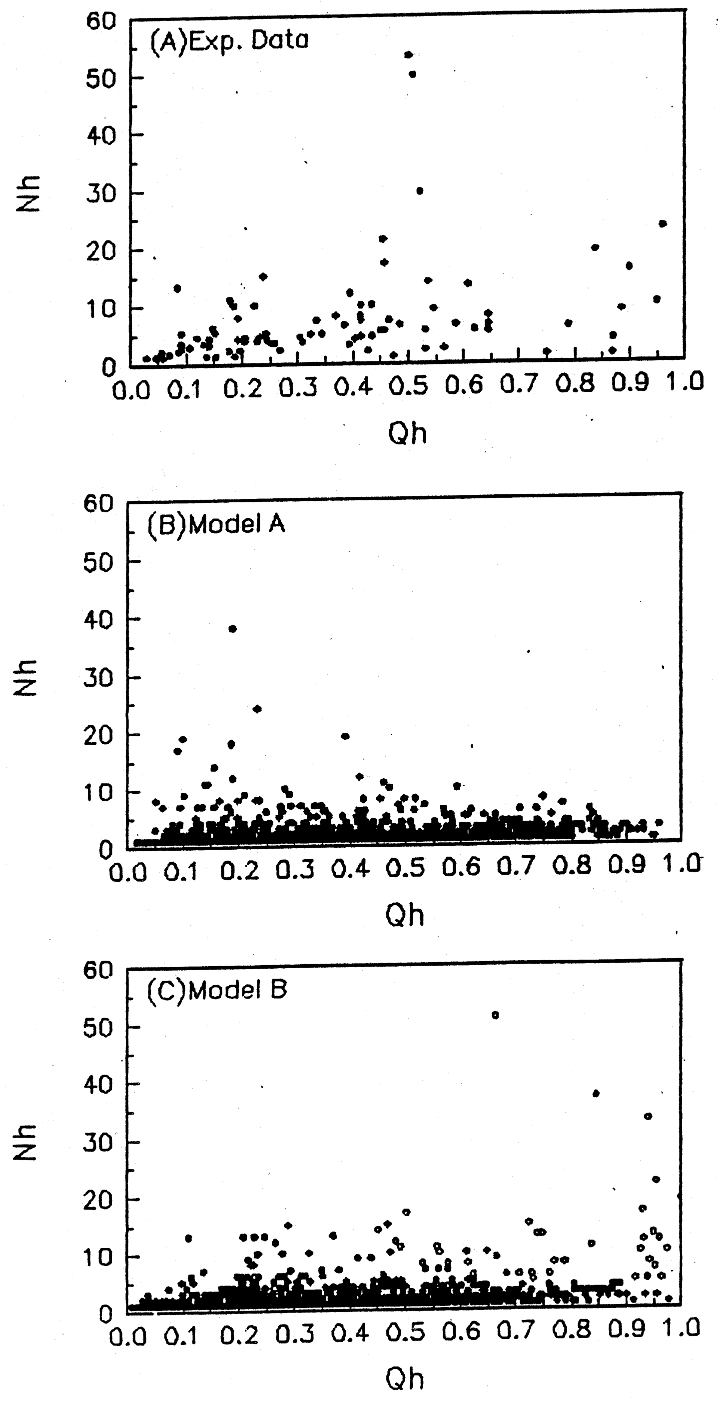

Figure 4: A Distributions of the number of hadrons, N(h), vs. the energy fraction in hadrons, Q(h), from the Mt. Chacaltaya data compared with Monte Carlo distributions without and with a 30% forward contribution from DCC [6]. The data is plotted in (A), the Monte Carlo simulation, assuming a binomial distribution of charges of the produced pions, in (B), and the same Monte Carlo with the addition of 30in the forward direction in (C).

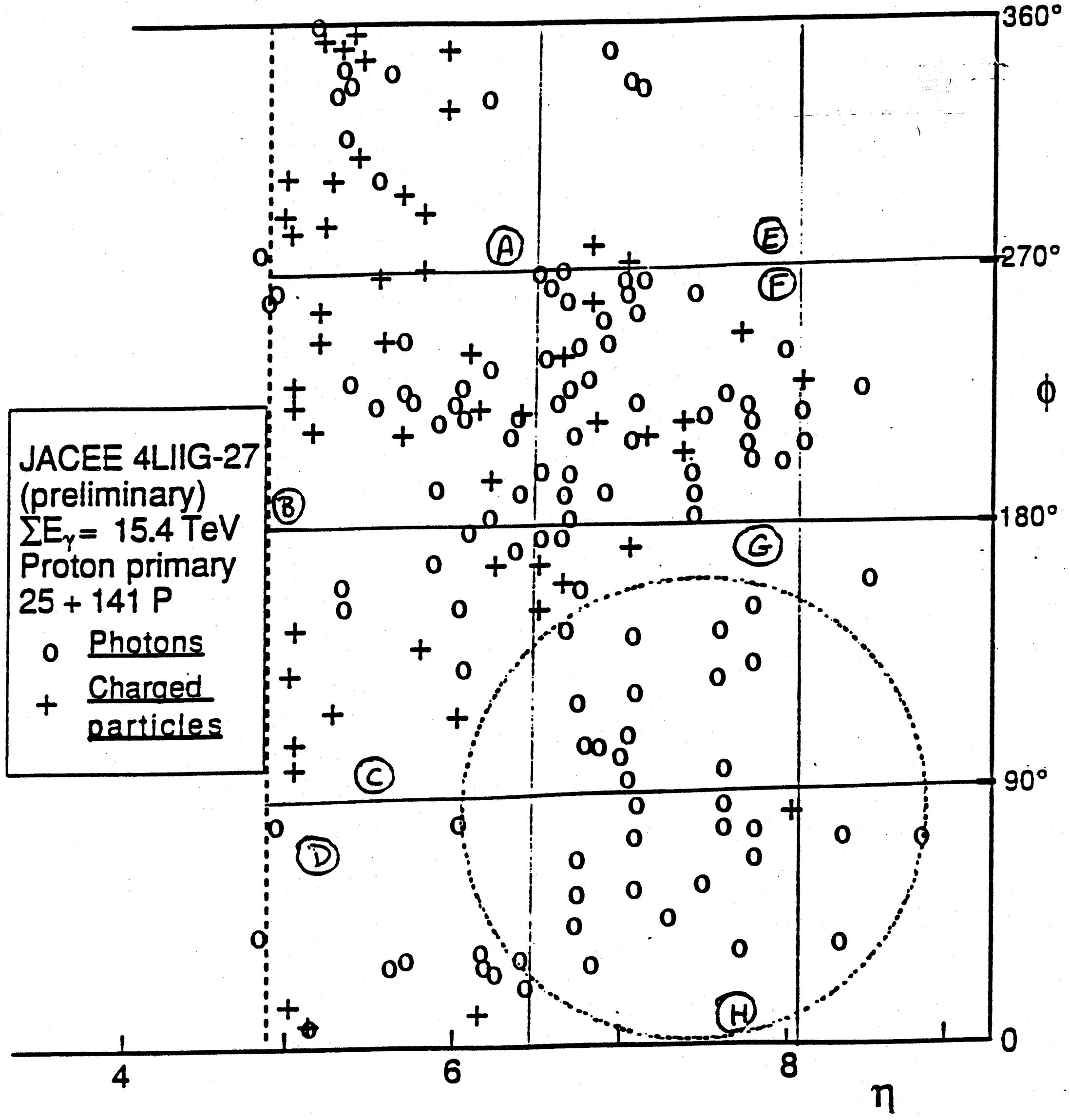

Figure 5: A JACEE Anti-Centauro candidate [7]. The region of phase space within the dotted circle contains only one charged hadron.

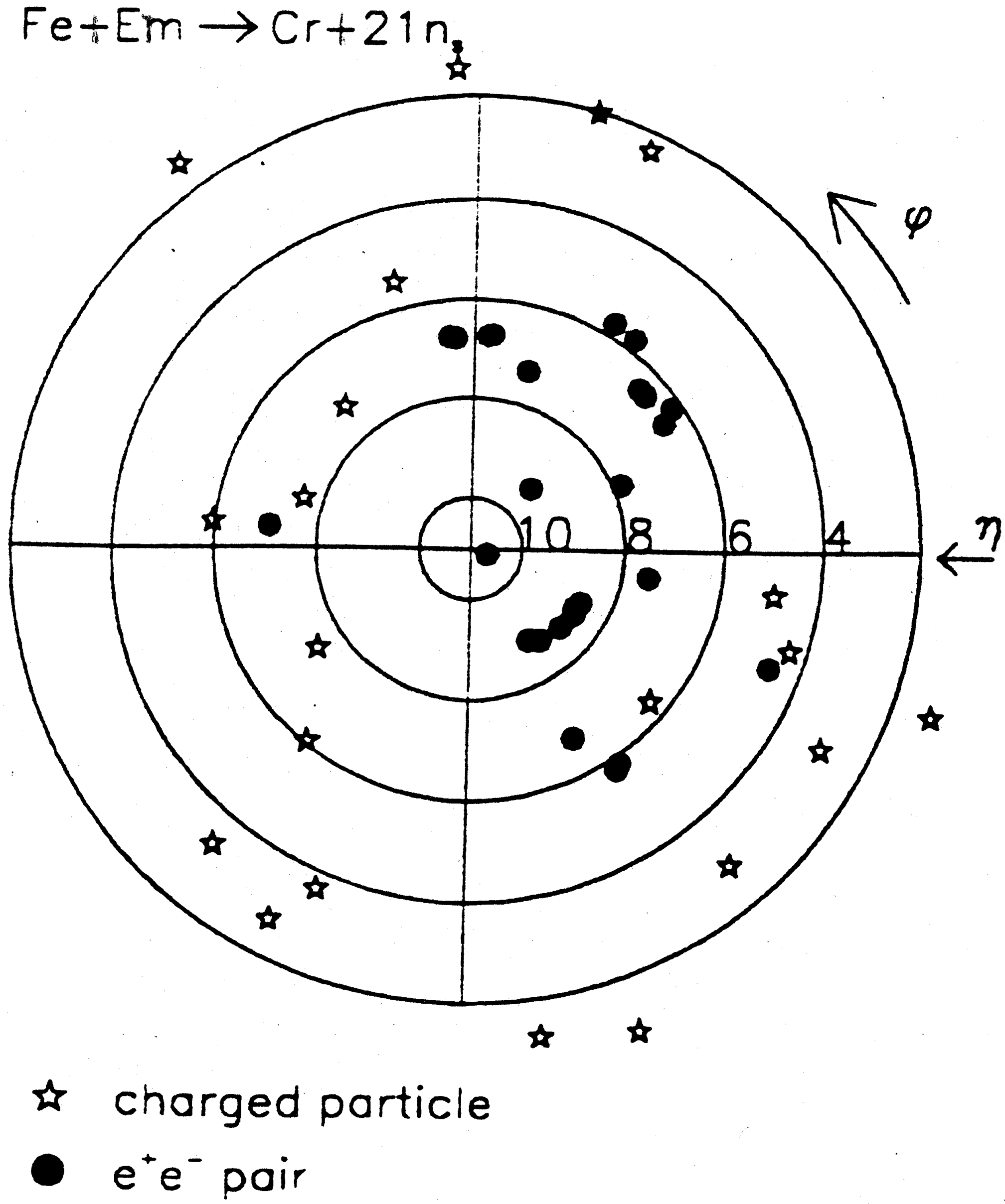

Figure 6: A more recent JACEE Anti-Centauro candidate [7]. Here the phase space is represented in polar coordinates, with negative-η plotted radially.

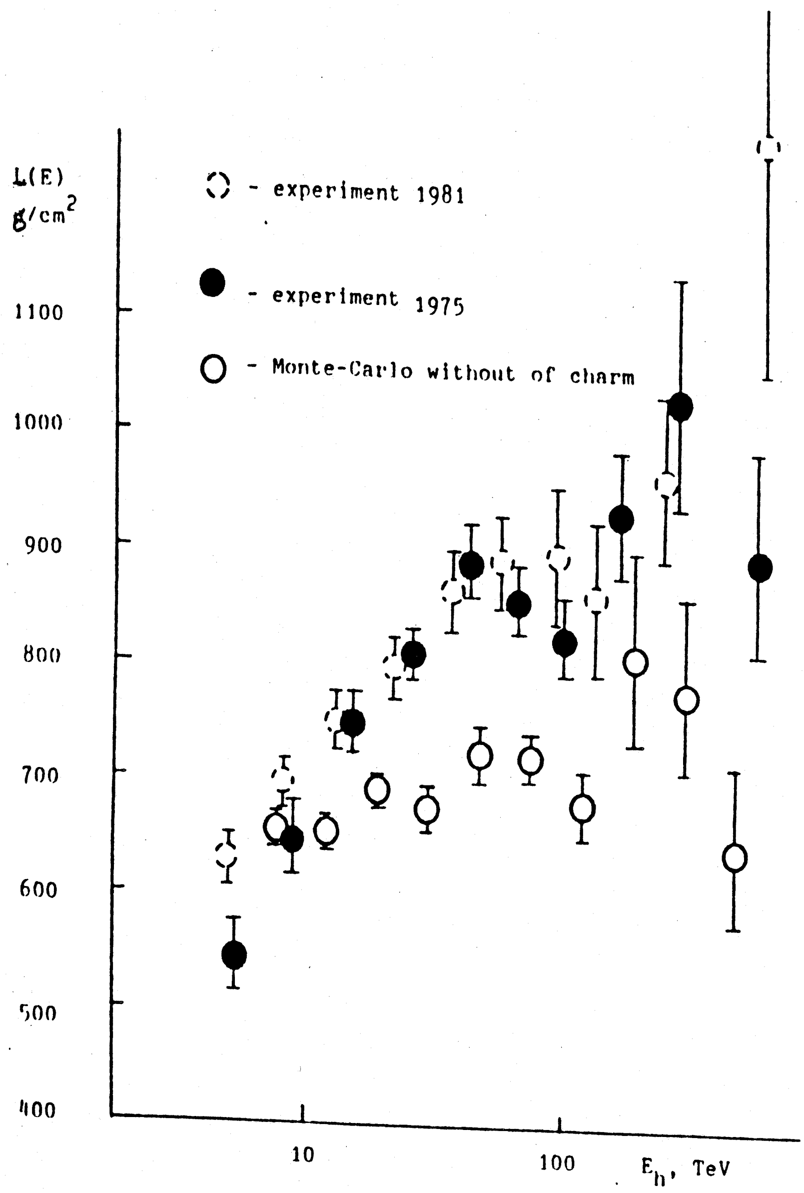

Figure 7: Compilation of the ionization attenuation length, L(E), data for the Russian lead calorimeter[8]. The Monte Carlo simulations based on established lower-energy models is plotted as open circles.

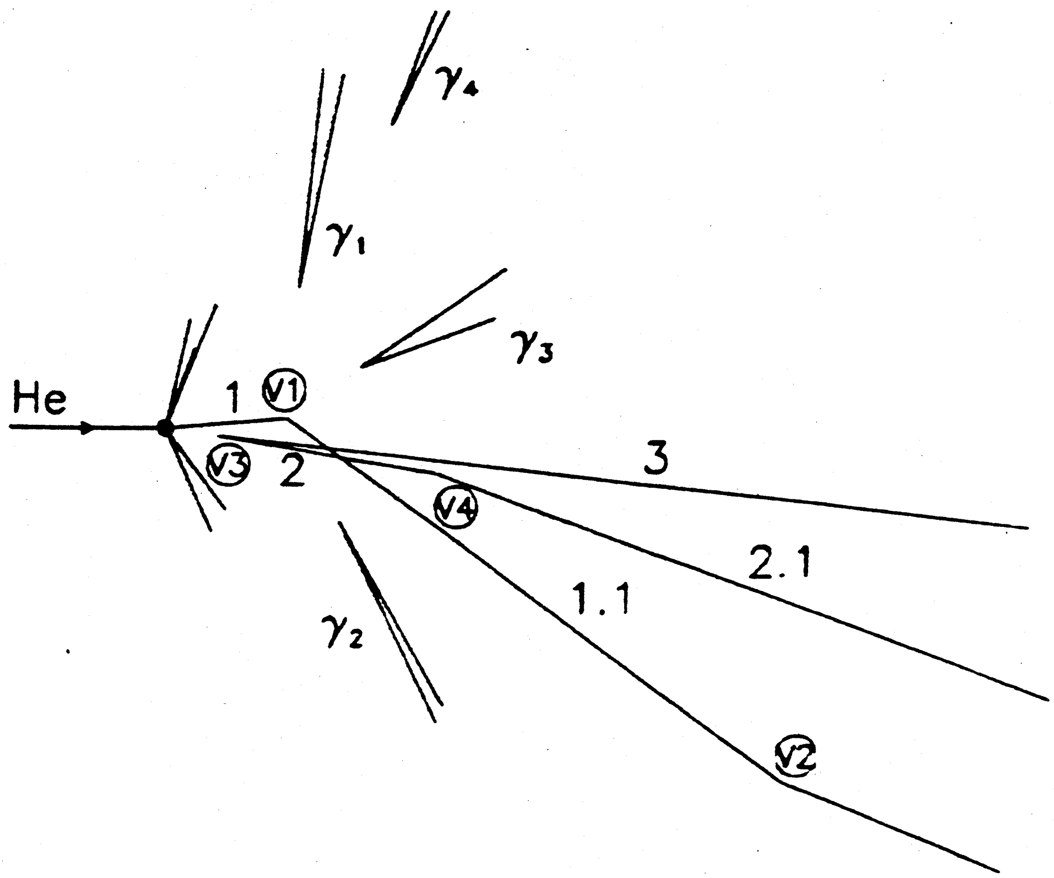

Figure 8: Shematic of decays observed in an unusual JACEE event [9]. Only the interesting tracks are shown; the lateral V's are electron-positron pairs. There is a horizontal-vertical scale distortion of about 1:100. The vertices, V1 - V4, are probable decay vertices of b or c quark states.

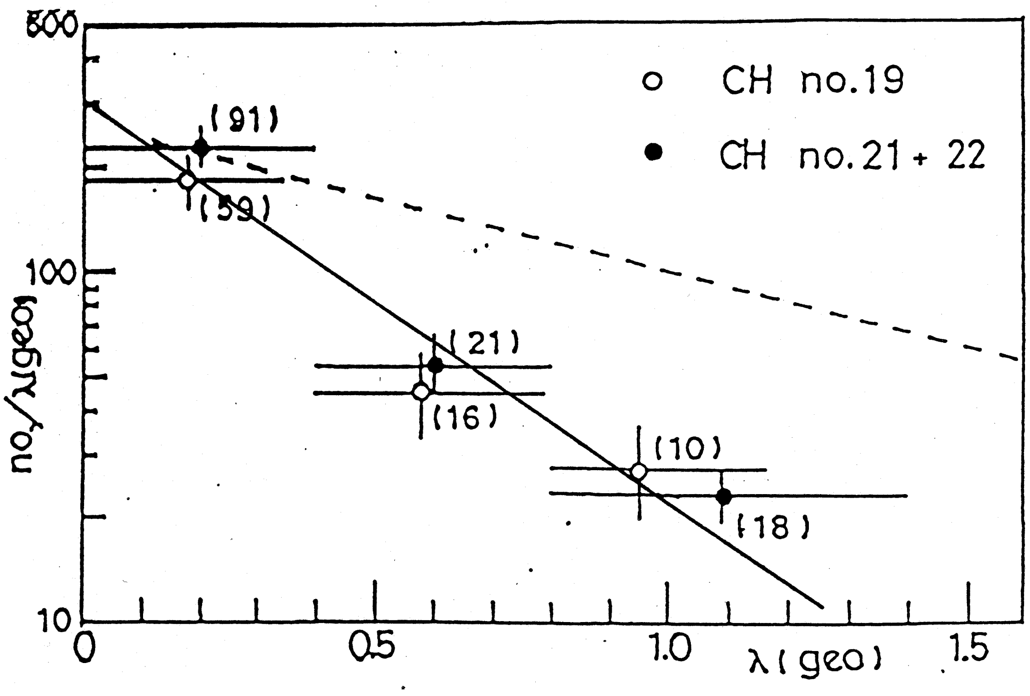

Figure 9: Anomalous mean free path of family hadrons as reported by the Chacaltaya-Pamir Collaboration [17]. The points represent the cascade starting positions for hadrons in families. The abscissa is the depth in the chamber in units of the geometrical mean free path in Pb; the dashed line is the observed attenuation for unaccompanied hadrons. The solid and open circles refer to data from two different emulsion chamber exposures, chamber 19 and the sum of chambers 21 and 22.

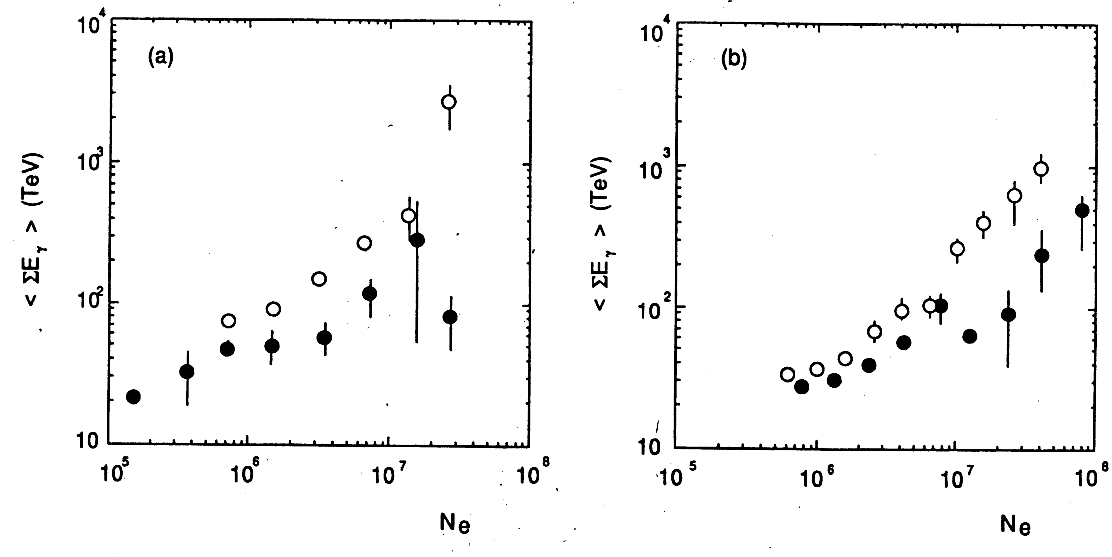

Figure 10: Correlation between air shower size, N(e), and visible energy in emulsion chamber families, ΣE_γ [18]. The left graph is from the Chacaltaya results, the right graph from the Tien-Shan experiment.