

Figure 11.2 Shower profiles in lead. The number of electrons should be multiplied by a normalization factor of 0.79. (D. Müller, Phys. Rev. D 5: 2677, 1972.)

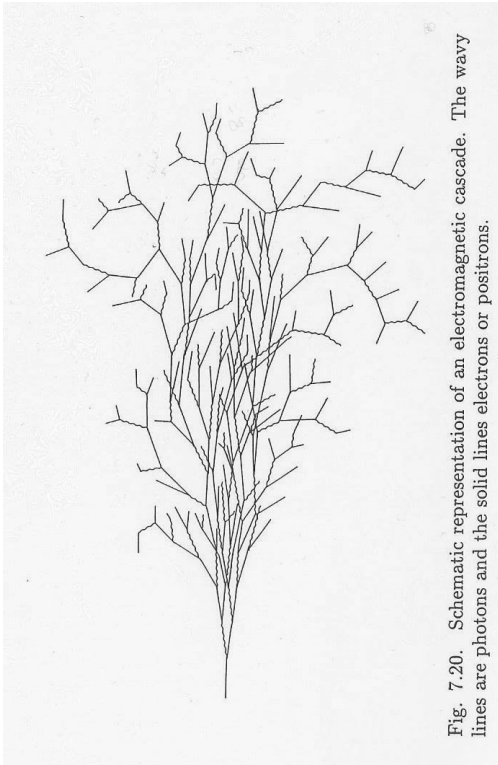
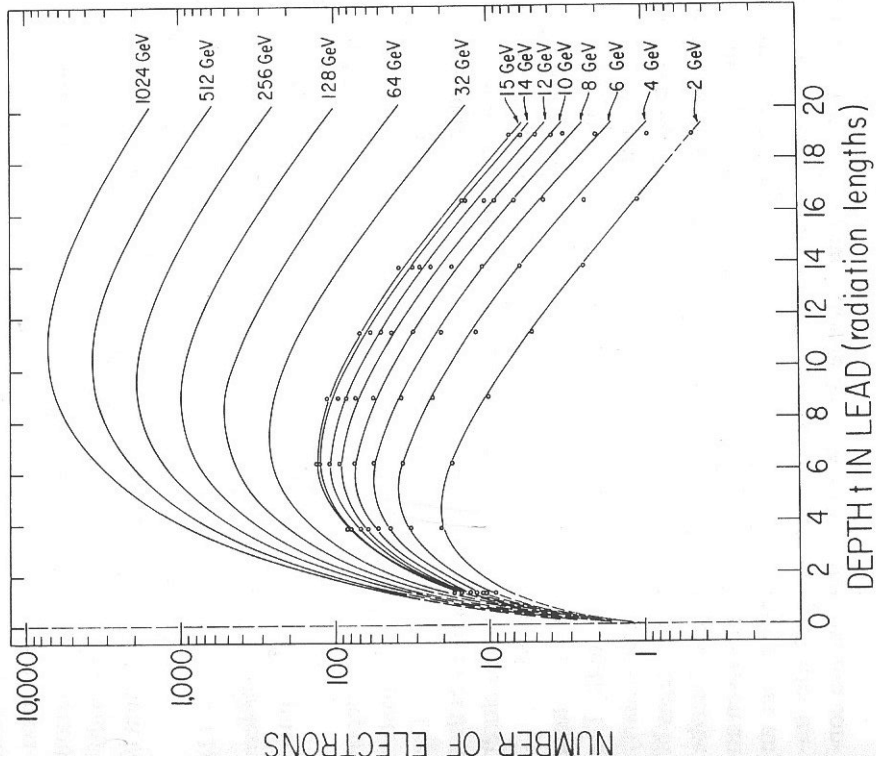
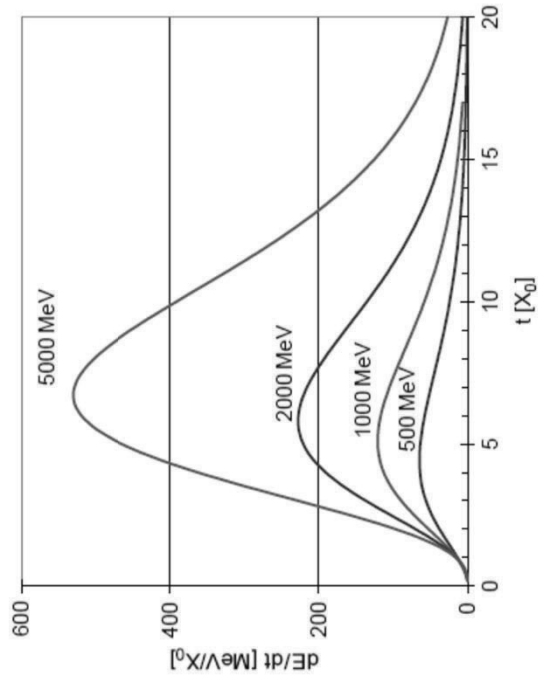
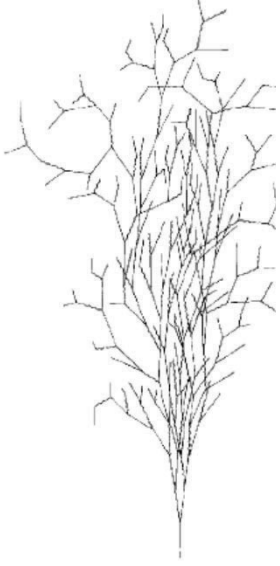


Fig. 7.20. Schematic representation of an electromagnetic cascade. The wavy lines are photons and the solid lines electrons or positrons.



Svilupo longitudinale di una shower em.

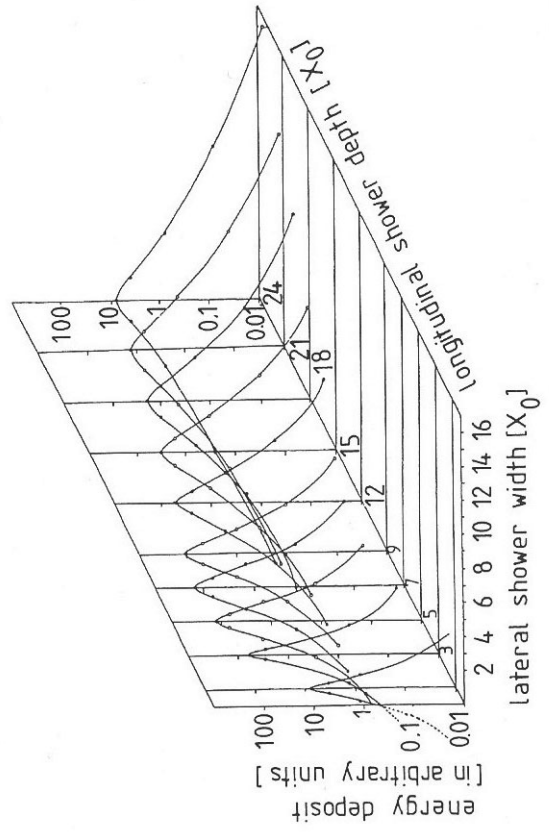
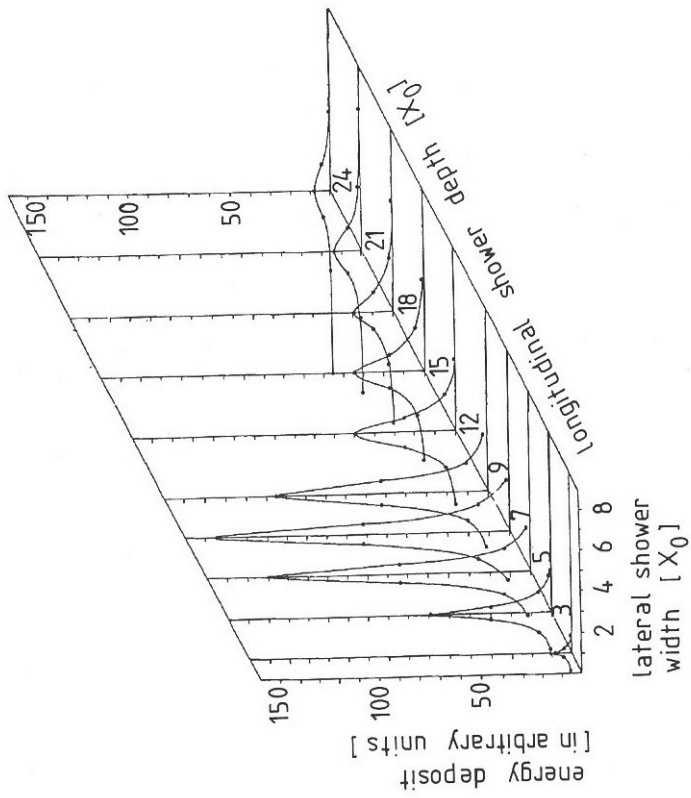
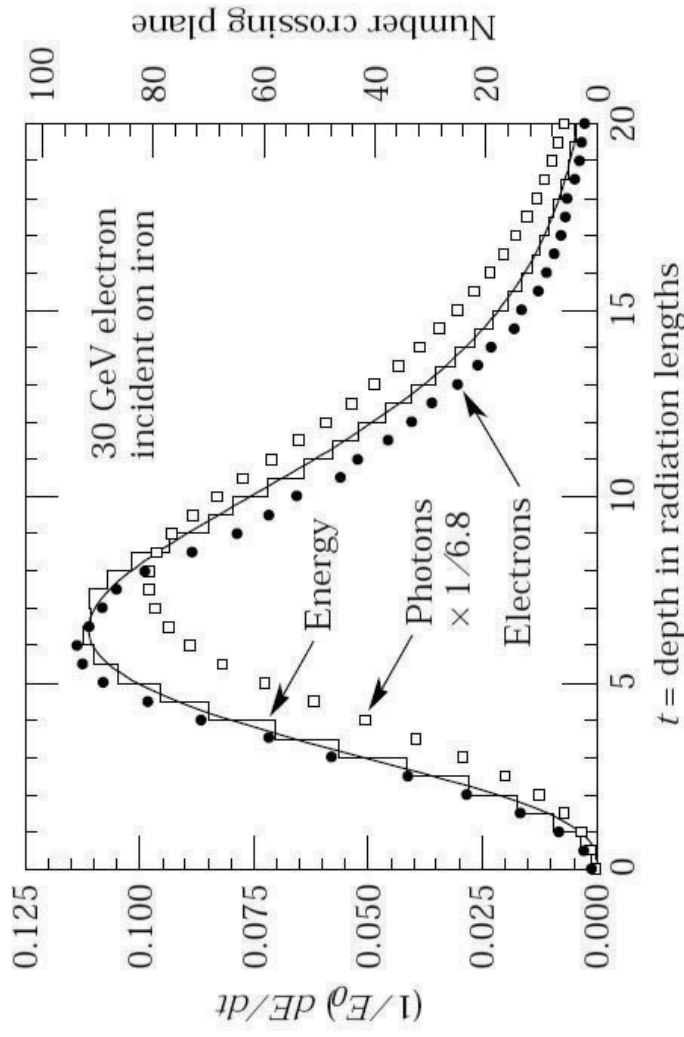


Fig. 7.23. Longitudinal and lateral development of an electron shower (6 GeV) in lead shown with linear and logarithmic scales (based on [504, 505]).



**Figure 27.18:** An EGS4 simulation of a 30 GeV electron-induced cascade in iron. The histogram shows fractional energy deposition per radiation length, and the curve is a gamma-function fit to the distribution. Circles indicate the number of electrons with total energy greater than 1.5 MeV crossing planes at  $X_0/2$  intervals (scale on right) and the squares the number of photons with  $E \geq 1.5$  MeV crossing the planes (scaled down to have same area as the electron distribution).