

Fig. 6.5: Simulated energy deposition of elementary particles of different types in a slice of the ATLAS detector (figure courtesy of CERN and the ATLAS collaboration). The interaction point at the center of the detector is at the bottom of this figure. Particles produced in collisions move upward from this point. From left to right, we see the signals of a muon, which penetrates the whole detector, a photon, which makes no track but is visible in the electromagnetic calorimeter, a proton and a neutron, which are visible in the hadronic calorimeter, and an electron. Finally, we see the trace of a neutrino, which makes no signal at all.