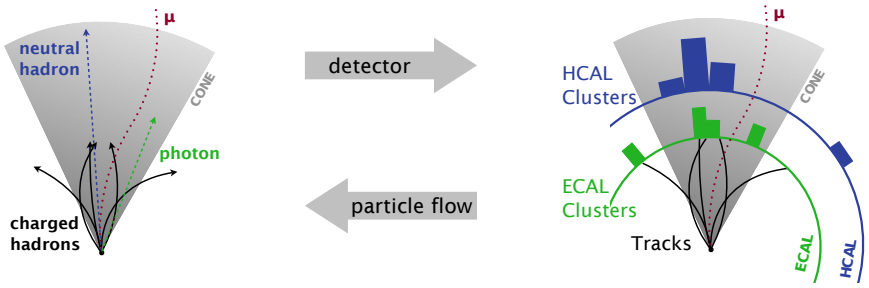

Fig. 3.4 Schematic association of subdetector measurements to physical particle candidates using the PF technique of CMS. *(Illustration courtesy of F. Pandolfi)*

the average jet energy. In reconstructing the PF candidate four-momenta, photons are assumed massless and charged hadrons are assigned the charged pion mass. To demonstrate the percent level agreement of the PF global event interpretation between data and simulation, Fig. 3.5 shows the jet energy fractions attributed to each PF particle category versus p_T within $|\eta| < 1.3$ on the left and versus η for jets with $56 < p_T < 74$ GeV on the right. Outside the tracker coverage beyond $\eta = 2.5$ the differentiation between charged and neutral particles is not possible anymore.

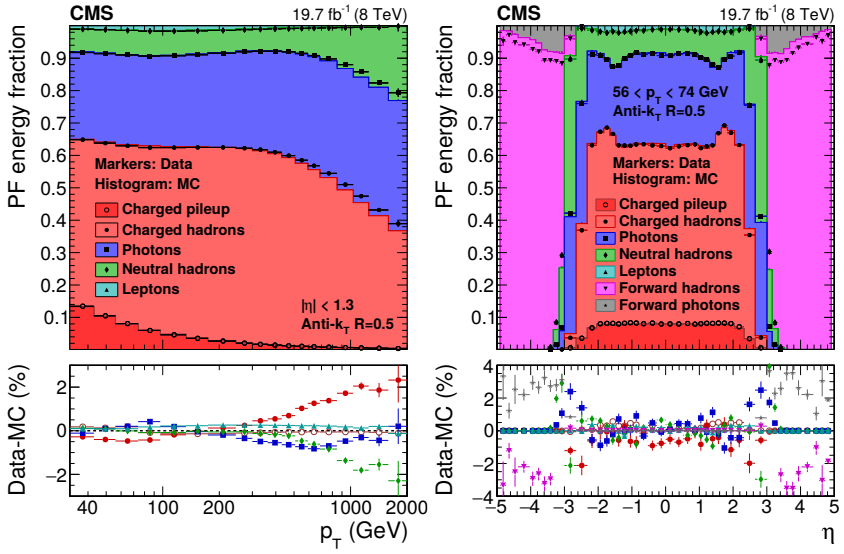

Fig. 3.5 PF jet composition in data and simulation versus p_T at $|\eta| < 1.3$ (left), and versus η at $56 < p_T < 74$ GeV (right). *(Taken from Ref. [9])*