

Electric-magnetic duality in nonabelian Yang-Mills theory implies the existence of a broken symmetry dual to the colour symmetry in QCD. If interpreted as the obviously broken generation symmetry, whereby fermions occur in three copies (e.g. electron, muon, tauon), one can derive a scheme in which one automatically obtains exactly three generations, with the observed hierarchical masses, and nontrivial mixing between the up and down fermions (up-quarks with down-quarks, and neutrino mixing). With three parameters, most known data on masses and mixing can be obtained within experimental bounds.