Structure within the Atom

Quark
Size $< 10^{-19}$ m

Nucleus
Size $\approx 10^{-14}$ m

Atom
Size $\approx 10^{-10}$ m

Electron
Size $< 10^{-18}$ m

Neutron and Proton
Size $\approx 10^{-15}$ m

If the proton and neutrons in this picture were 10 cm across, then the quarks and electrons would be less than 0.1 mm in size and the entire atom would be about 10 km across.