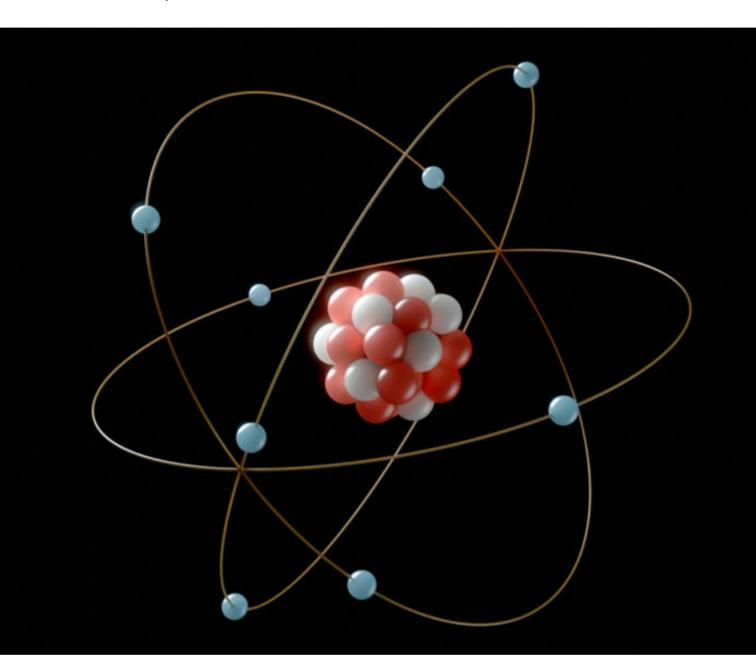
Why things never actually touch

If nothing touches, then what are we feeling when we "touch" something? What is the subatomic interaction that is occurring that gives us this illusion?

We first must understand that there is a lot of open space between the building blocks of matter. The atoms that create us are built from negatively charged subatomic particles called electrons, which orbit around a nucleus, composed of protons and neutrons. When atoms are close together, these electrons repel each other at a distance of 100 nano meters. Therefore, since everything is made up of atoms, there is always a minimum of 100 nano meter separation.



The reason we experience a touching sensation is due to the negative electron and positive proton's charge. This interaction causes an electric field to be generated around objects. Which when it is being interacted with, stimulates a response for our neural signals to give the perception of feel. Though our electrons require their personal space, resulting in atoms never touching. We still exist due to our atoms constantly interacting, inherently holding matter together. Keeping us and everything we know close, but never too close...

