

# [P.p1 arial; -webkit-text-stroke: #000000} span.s1 {font-kerning: none} span.s2](https://assignbuster.com/pp1-arial-webkit-text-stroke-000000-spans1-font-kerning-none-spans2/)

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s2 {font: 8. 0px Arial; font-kerning: none}span. Apple-tab-span {white-space: pre}“ Suspension of disbelief” is necessary in natural sciences, like physics, in order to accept new ideas and create new theories. In the 1900s, German physicists Max Plank discovered quantum mechanics when he was trying to find out why the results from his black body experiment contradicted the laws of classical physics. He found that energy is discharged in small quantities and are emitted in wavelengths. His theory was developed further by Einstein and other well-known physicists. Plank and Einstein suspended their beliefs by changing their scientific ideas, which enabled them to hypothesise something surreal.

By applying the principle of “ suspension of disbelief”, they were going against the old physics paradigm and the physics axiom of knowledge. This caused shared knowledge to be produced as well as a paradigm shift to take place. This raises questions about can paradigm shifts happen if one cannot imagine beyond their paradigms? Imagination as a way of knowing plays an important role when one is suspending their disbeliefs. Because the principle of “ suspension of disbelief” in natural sciences is the willingness to accept ideas and concepts even if they are not realistic, imagination has to be used. The Higgs Boson particle was discovered by using imagination. Peter Higgs and other physicists in the 1960s imagined that the space was filled with an invisible field, the Higgs field, so that they could make their equations work. They imagined an alternative reality and therefore, applied “ suspension of disbelief”. It is very hard for the shifts to take place if one is unable to imagine an alternative reality.

If one cannot imagine beyond their own beliefs, then their own personal knowledge cannot be developed and neither can new knowledge be produced. The shifts happen when one suspends their prior beliefs and accepts new ones, which shows how “ suspension of disbelief” is essential in causing paradigm shifts and in creating new theories.