2. Nuclear forces have the shortest range. They operate within the nucleus only, i.e., upto distance of the order of 10^{-14} meter.
3. Nuclear forces do not depend on charge on the nucleon.
4. Nuclear forces do not obey inverse square law. They vary inversely as some higher power of distance between nucleons.
5. They are basically attractive forces. Only when distance between nucleons is less than 0.8 fermi, nuclear forces become repulsive.
6. Nuclear forces are non central forces.
7. They are also non-conservative forces.
8. The field particle for nuclear forces is the 'π-meson'.

The relative strength of four types of basic forces in nature can be represented as

$$F_G : F_W : F_E : F_N = 1 : 10^{25} : 10^{36} : 10^{38}$$

Unification of Forces

"By unification of forces, we mean that there exists a relationship between the various forces of nature". A lot of efforts have been made towards unification of different forces and domains of Physics.

Some of the main achievements in the direction of unification are as follows: