Types of frame of reference

- 1. Inertial frame of reference
- 2. Non inertial frame of reference

Inertial frame of reference

- In Newton second law, F= ma
- If force applied on the body F= 0, then acceleration produced by the body is zero a=0. but mass is not equal to zero.
- This inertial frame is also known as non accelerating frame.
- Inertial frame is also called Non rotating frame in case of rotational motion.

Inertial frame of reference

- A frame of reference which obeys Newton laws of motion is called Inertial frame of reference.
- Also called Galilean, Newtonian frame of reference.

Non inertial frame of reference

- A frame of reference which doesn't obeys Newton laws of motion is called non inertial frame of reference.
- Non inertia means the frame of reference which doesn't moves with uniform velocity.
- Here acceleration of the body is not equal to zero.

Non inertial frame of reference

- Force applied on the body is zero but acceleration is not zero.
- Hence this frame is also called accelerating frame.