

1. Describe the Galilean view of the Universe

- heliocentric universe

2. Using an example state Galileo's principle of relativity. Outline the main consequences of this principle.

- Galileo's principle of relativity was that you cannot tell if you are moving or not without looking outside your frame of reference – now way to differentiate between an immobile body and a body in constant motion.
- There is no meaning to the motion of an object, without reference to its movement relative to another object.
- Consequence: Velocity is only **relative**, can only be measured in reference to another object, therefore measurements will change in different frames of references.
- Galileo suggested that the natural state of objects is not to be at rest, but to be in a state of uniform motions.
- Galilean relativity holds that there is nothing special about zero velocity, and that a force acting for a period of time will cause the same change in the velocity of an object, no matter what the initial velocity might be.
- Galilean relativity also states that a change in velocity will be identical, whether measures from a stationary frame of reference or non-zero inertial frame of reference
- In summary: he proposed that there was no absolute frame of reference (one which is absolutely stationary) and developed sets of equations to describe both linear and projectile motions.