

Session 9 minutes:-

- Exoplanets are planets that orbit stars other than the Sun.
- To date, 6140 exoplanets have been discovered.
- Detection methods for finding exoplanets:-
 1. Transit method
 2. Radial velocity method
 3. Astrometry
 4. Direct Imaging
 5. Gravitational microlensing
- Transit method:- The passage of a planet between a star and Earth is called transit. When an exoplanet passes in front of its star there is a sudden reduction of starlight coming towards Earth. These transits can help us detect exoplanets.
- Earth Similarity Index:- It is a proposed characterization to detail how similar a planet or natural satellite is to the planet Earth.
- Some known exoplanets with their ESI (Earth Similarity Index):-
 1. KOI-678.01 \Rightarrow 0.98
 2. Gliese 667C c \Rightarrow 0.85
 3. TRAPPIST-1e \Rightarrow 0.95