Exoplanet Detection Methods

- **Dynamical**
  - Timing
  - Radial velocity
  - Astrometry

- **Micro-lensing**
  - Free-floating

- **Photometry**
  - Imaging
  - Optical radio

- **Transits**
  - Space
  - Ground

- **Imaging**
  - Space
  - Ground
  - Ground (adaptive optics)

- **Astrometry**
  - Imager

- **Microlensing**
  - Reflected/polarised light

- **Photometry**
  - Photometric astrometric

- **Exo-moons?**

Numbers from NASA Exoplanet Archive:

- 3572 exoplanets (~2600 systems, ~590 multiple)
- 662 planets (504 systems, 102 multiple)
- 53 planets (51 systems, 2 multiple)
- 44 planets (40 systems, 2 multiple)
- 482 planets (>6R⊕, 1187 (2–6R⊕)
- 2789 planets (2053 systems, 474 multiple)
- 373 planets (<1.25R⊕)
- 76 planets (1.25–2R⊕)
- 1187 planets (2–6R⊕)
- 1187 planets (>6R⊕)

**Discoveries**:

- 32 planets (20 systems, 5 multiple)
- 662 planets (504 systems, 102 multiple)
- 1 planet (1 system, 0 multiple)
- 53 planets (51 systems, 2 multiple)
- 44 planets (40 systems, 2 multiple)
- 766 planets (1.25–2R⊕)
- 2789 planets (2053 systems, 474 multiple)
- 1 planet (1 system, 0 multiple)
- 662 planets (504 systems, 102 multiple)
- 53 planets (51 systems, 2 multiple)
- 44 planets (40 systems, 2 multiple)

**Reflective/polarised light**

- 1 January 2018
- 3572 exoplanets (~2600 systems, ~590 multiple)

**Methods**

- Protoplanetary disks
- Debris disks/colliding planetesimals
- Star accretion/pollution
- White dwarf pollution
- Radio emission
- X-ray emission
- Gravitational waves

**Protoplanetary disks**

- Star accretion/pollution
- White dwarf pollution
- Radio emission
- X-ray emission
- Gravitational waves