Search for Exoplanets

(project proposal)

Current State

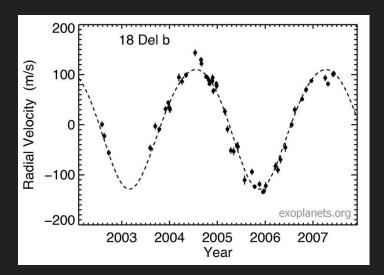


Kepler space observatory (launched in 2009)

Transiting Exoplanet Survey Satellite (launched in April, 2018)

- 3,758 confirmed exoplanets in 2,808 systems, with 627 systems having more than one planet.
- expecting 20,000 new exoplanets in the next 2 years

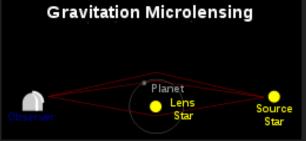
Methods



Radial velocity

Transit Light Curves Kepler 4b Kepler 5b Kepler 6b Kepler 7b Kepler 8b Flux 0.995 Phase (hours) Phase (hours) Phase (hours) Orbital 4.9 days Period 3.2 days 3.5 days 3.2 days 3.5 days Size (R_E) 4.31 18.8 15.0 16.9 18.3

Transit photometry



Gravitational microlensing

Model

