**Analysis of “Exoplanets: Past, Present, and Future” (Chien-Hsiu Lee, 2018)**

This review paper systematically traces the evolution of exoplanet science, from the first detections in the 1990s to the diverse population studies of the present day, and outlines future observational prospects. The author categorizes detection methods into radial velocity, transit photometry, microlensing, and direct imaging, explaining the operational principles, strengths, and limitations of each. Importantly, the paper highlights how *Kepler* transformed our statistical understanding — revealing that compact multi-planet systems and super-Earths are common, even though they are absent in our own Solar System.

Lee also emphasizes that no single technique gives a complete picture: radial velocity offers mass estimates, transit photometry yields radius and orbital inclination, microlensing probes distant cold planets, and direct imaging reveals young massive planets. This multi-method synergy is crucial for refining planet formation models, particularly migration scenarios.

The paper’s forward-looking section stresses the need for technological improvements — higher precision spectrographs, space-based transit missions, and advanced high-contrast imaging — to move from mere detection to detailed atmospheric characterization, which is key for assessing habitability. Overall, the work is not only a status report but also a roadmap for the next phase of exoplanet exploration.