The Hebrew University of Jerusalem , Astrophysics Seminar

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Kaplun Building, Seminar room, 2nd floor

"Planet Formation At Large Radial Distances"

Direct imagining has revealed the existence of planets at tens of AU from their parent stars. This, together with current and future detections of planets at intermediate and large radial distances can impact significantly our understating of planets by shedding light on an unexplored region of planetary systems.

Theory, and planet formation models in particular, must explain this planetary population and provide answers the following questions: What are the required conditions to form planets at large radial distances? Do planets at large separations form in situ or do they arrive there after their formation via scattering or outward migration? Can we discriminate between core accretion and disk instability when it comes to giant exoplanets at tens of AU?

In this talk, I will summarize the two leading planet formation models, address how they are linked to the existence of planets at large separations and provide (partial) answers to the questions above.

Additional details of the upcoming Astrophysics' seminars can be found at the following link - Astrophysics Seminars