



# The Israel Society for Astrobiology and the Study of the Origin of Life

35<sup>th</sup> Annual Meeting 30<sup>th</sup> May, 2022 | The Hebrew U. of Jerusalem, Los Angeles bldg

<https://huji.zoom.us/j/4737911164>

08:30-09:00 – Coffee and light breakfast

09:00-09:05 – Welcome note, Danny Porath, Vice Dean of Faculty of Science, HUJI

09:05-09:10 – Welcome note, Shlomo Yitzchaik, Head of the Institute of Chemistry, HUJI

09:10-09:20 – Opening note, Moran Frenkel-Pinter, HUJI

Session 1 – Origin of Life *Chair: Moran Frenkel-Pinter*

09:20-10:00 – **Keynote: Loren Williams (Georgia Tech) - RNA and Protein: Molecules in Mutualism**

10:00-10:15 – **Nir Ben-Tal (TAU) -Protein archaeology: How proteins emerged and evolve?**

10:15-10:30 – **Tanaya Bose (WIS) - Glimpse into origin of life: From RNA to proteins**

10:30-10:45 – **Avshalom C. Elitzur (chapmanU) - The Ski-Lift Pathway to Complexity: Thermodynamically Unique, Biologically Ubiquitous**

10:45-11:00 – **Itay Fayerverker & Tal Mor (Technion) - Emergence of the code - a model of three amino acids**

11:00-11:15 – **Ayala Lampel (TAU) - Biomolecular Condensates Formed by Designer Minimalistic Peptides**

11:30-13:00 – Lunch break

Session 2 – Biochemistry *Chair: Nir Ben-Tal*

13:00-13:40 – **Keynote: Itamar Willner (HUJI) - A Protoribosome and Prebiotic Nanotechnology**

13:40-13:55 – **Sergey Semenov (WIS) - Probing out-of-equilibrium conditions in prebiotic chemistry**

13:55-14:10 – **Moran Frenkel-Pinter (HUJI) – Chemical Evolution Reimagined**

14:10-14:25 – **Meital Reches (HUJI) - The amino acid DOPA in Peptides, Materials & Origin of Life**

14:25-14:40 – **Norman Metanis (HUJI) - Functional “Ambidexterity” in an Ancient Nucleic Acid-Binding Protein**

14:40-14:55 – **Hava Sadihov-Hanoch (BGU) - Nucleic-Acid-Peptide chimeras in the origin of life**

14:55-15:30 – Coffee break & Poster session

Session 3 – Astrobiology *Chair: Amri Wandel*

15:30-15:50 – **Amri Wandel (HUJI) - Copernican solution to the Fermi Paradox**

15:50-16:10 – **Uri Malamud (Technion) - Are there any pristine comets? Constraints from pebble structure**

16:10-16:30 – **Volker Perdelwitz (ArielU) - Chromospheric Activity of Planet Host Stars**

16:30-16:50 – **Alona Vazan (OpenU) - Habitability of water-rich planets**

16:50-17:10 – **Inwoo Han (KASI, South Korea) - Planets of evolved giant stars: detection and habitability**

17:10-17:15 – **Concluding remarks, Amri Wandel**

