



The Israel Society for Astrobiology and the Origin of Life (ILASOL)

27th annual meeting December 1st, 2013

09:00 Botnar auditorium, Weizmann Institute of Science

08:45-09:00 *Breakfast & Gathering*

Session 1 – Astrobiology

09:00-09:15 Gonen Ashkenasy (BGU) Opening remarks

09:15-09:40 Amri Wandel (HUJI) How frequent is extraterrestrial biotic life?

09:40-10:05 Ravit Helled (TAU) The formation of Uranus and Neptune and intermediate-mass planets

10:05-10:30 Joseph Gale (HUJI) Could planets orbiting red dwarf stars support oxygenic photosynthesis and hence complex life?

10:30-10:45 *Coffee break*

Session 2 – Biochemistry

10:45-11:30 Antonio Lazcano (UNAM) Planetary evolution and biochemical adaptations: between contingency and determinism?

11:30-11:55 Mark Safró (WIS) The mechanistic and evolutionary aspects of the 2'- and 3'-OH paradigm in biosynthetic machinery

11:55-12:20 Malcolm E. Schrader (HUJI) Origin of chirality in proteins

12:20-12:40 Boris Rubinov (BGU) From structure to function: possible Implications of β -sheet peptides to the origin of life

12:40-13:20 *Lunch*

Session 3 – Evolution

13:20-13:40 Doron Lancet (WIS) Perspectives on ILASOL

13:40-14:05 Omer Markovitch (WIS) Prebiotic evolution of molecular assemblies: from molecules to ecology

14:05-14:30 Avshalom Elitzur (IYAR) How fast can life evolve?

14:30-15:05 Ute Deichmann (BGU) The role of experiments, preconceived ideas, and scientific authorities in early controversies about the origin of life and the creation of artificial life in the laboratory

15:05-15:20 *Coffee break*

Session 4 – Physics of Life

15:20-15:45 Arik Yochelis (BGU) Significance of a nonlinear pattern formation approach to cell morphology and functionality

15:45-16:10 Meir Shinitzky (WIS) Global asymmetry of space and time – are they interrelated?

16:10-16:35 Renan Gross (WIS) Compositional assemblies behave similarly to quasispecies model

16:35-17:00 Naftali Tishby (HUJI) Life and information

17:00 Nathaniel Wagner (BGU) Closing remarks

<http://www.ilasol.org.il>

