



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

## 23<sup>rd</sup> Annual Meeting December 13<sup>th</sup>, 2009

### Session 1

- 9:00-9:05 Doron Lancet (WIS) Opening Remarks  
9:05-9:25 Amri Wandel (HUJ) The Fermi-SETI paradox: When should we expect ET to call?  
9:25-9:55 Sonja Prohaska (Leipzig University, Germany) The definition of genes  
9:55-10:25 Ilana Agmon (TEC, HUJ) (with Ada Yonath, WIS) Identification of the prebiotic translation apparatus within the contemporary ribosome  
10:25-10:55 Peter Stadler (Leipzig University, Germany) Simulating the origins of metabolism

10:55-11:10 Coffee Break

### Session 2

- 11:10-11:40 J. Peter Gogarten and Gregory P. Fournier (University of Connecticut, USA) Rooting the ribosomal tree of life using the early expansion of the genetic code  
11:40-12:10 Shmuel Pietrokovsky (WIS) Insert, fracture, break and scatter - gene fission by inteins and homing endonucleases  
12:10-12:40 Eshel Ben-Jacob (TAU) Bacteria guided reflections on water complexity

12:40-1:20 Lunch

### Session 3

- 1:20-1:50 Akiva Bar Nun and Gideon Fleminger (TAU) Chemical evolution - the case of beta-galactosidase  
1:50-2:20 Ohad Carny and Ehud Gazit (TAU) Self-assembling short peptides: significance for prebiotic molecular evolution  
2:20-2:50 Gonen Ashkenasy (BGU) Replication of short and simple peptides and its relevancy to the origin of life

2:50-3:05 Coffee Break

### Session 4

- 3:05-3:35 Tereza Pereira de Souza and Pier Luigi Luisi (Friedrich-Schiller-Universität Jena, Germany) Vesicles as model compartments for the study of minimal cells and origin of life  
3:35-4:05 Maya Kleiman and Emmanuel Tannenbaum (BGU) Diploidy and the selective advantage for sexual reproduction in unicellular organisms

**Botnar Auditorium, Weizmann Institute of Science**

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