

# THE DEEP SECRETS OF LIFE

Beyond the standard paradigms  
of physics, chemistry and biology

23.01.2012

Aula Convegni, CNR Headquarters - Piazzale Aldo Moro, 7, 00185 Rome, Italy

9.30 Welcome and Opening Addresses:

**Giuseppe MARTINI** (CNR, Life Science, Director), **Giancarlo RUOCCO** (Sapienza, Prorector)  
**Daniel ZAJFMAN** (Weizmann, President) and **Robert PARIENTI** (Weizmann Europe)

Chair: Maurizio Brunori, Itamar Procaccia

9.45 **Ada YONATH** Weizmann, **Nobel Laureate**, Faculty of Chemistry - Department of Structural Biology  
**What was first: the genetic code or its products, the proteins?**

10.30 **Guido MARTINELLI**, SISSA Director, Trieste  
**From the Standard Model to Dark Matter and beyond: symmetry, masses and mysteries**

11.00 Coffee break

Chair: Roberto Cingolani, Lia Addadi

11.30 **Itamar PROCACCIA**, Weizmann, Professor, Physics  
**Metallic glasses: promises, riddles and partial answers**

12.00 **Luciano PIETRONERO** CNR Institute of Complex Systems, Director, Rome  
**Complexity and bioinformatics**

12.30 **Ernesto DI MAURO** Università Sapienza Rome - Department of Biologia e Biotecnologie  
**Between non-life and life**

13.00 Lunch

Chair: Giancarlo Ruocco, Ada Yonath

15.00 **Lia ADDADI** Weizmann, Professor, Faculty of Chemistry - Department of Structural Biology  
**The best architects in the 5 kingdoms of life**

15.30 **Alberto LUINI** CNR, Istituto di Biochimica delle Proteine, Naples  
**Organization of the cell: the atom of life**

16.00 **Gilad HARAN** Weizmann, Professor, Chemical Sciences  
**Single-molecule dynamics within vesicle nanocontainers**

16.30 **Uri ALON** Weizmann, Professor, Faculty of Biology - Department of Molecular Cell Biology  
**Elementary biological circuits in living cells**

17.00 **Glauco TOCCHINI VALENTINI** CNR, Istituto di Biologia Cellulare  
**Of mice, men and kangaroos**

The Weizmann Institute of Science, The Department of Life Sciences, CNR, Italy  
Organizers: Giuseppe Martini, Ada Yonath, Ernesto Di Mauro, Robert Parienti