

## TOPICS

### I New Discoveries defining Complexity

Three main presentations are scheduled on this topic to focus on particular aspects of complexity, i.e. complexity and biological systems; complexity in climatology; complexity with an approach from epistemology and philosophy.

There are many ways of studying complexity. They generally all handle it by trying to understand the dynamic behaviour of complex systems that range from individual organisms to the largest economic, technical, social, and political systems. By confronting and allowing these approaches to interact, by exchanging views on different complex systems, we expect to gain new ideas and to try to answer such questions as : Which way did science work until now, how did it evolve, and how might it evolve in the future? How do big pictures emerge from a sea of data?

### II Origin and Migrations of Modern Humans

Three main presentations will try to answer the following questions: From the origin of the modern human being to today's Society, what are the forces involved, from where and how did we arrive at the point where we are now?

Palaeontology, anthropology, genetics and linguistics can contribute to our better understanding of our history. The three main presentations scheduled on this topic illustrate how these different approaches cross-fertilise each other and explore in depth what have they learnt and what they are poised to learn from each other.



## PROGRAM

### Thursday, 14 September

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1:00 p.m.

**Registration**

3:00 / 3:05 p.m. **Opening**

André Hurst, President, WKD Foundation

3:05 / 3:15 p.m. **Introduction to the Symposium**

Pascal Couchepin, Swiss Federal Councillor, Head of the Department of Home Affairs

3:15 / 3:25 p.m. **Bridging the Knowledge Cultures  
in the Age of Innovation**

Jàn Figel', European Commissioner for Education, Training, Culture and Multilingualism

**Scientific session 1 - Chair : Hiroyuki Yoshikawa, President, National Institute of Advanced Industrial Science and Technology, Japan**

3:25 / 3:35 p.m. **Introduction: "Two Cultures, one Human Mind"**

Francis Waldvogel, President Emeritus of the Swiss Polytechnical Institutes,  
Program Director of the WKD

3:35 / 3:45 p.m. **Address (video)**

Edward O. Wilson, Pellegrino Research Professor in Entomology, Harvard University, USA

3:45 / 4:00 p.m. **"The Rules of the Game" of the first Symposium:  
Objectives and Importance of the Dialogue**

Dame Julia Higgins, Professor of Polymer Sciences at Imperial College,  
London, Foreign Secretary and Vice President of the Royal Society, UK

4:00 / 4:15 p.m. **Break**

4:15 / 5:15 p.m. **Keynote Lecture I : From Brain Dynamics to  
Consciousness: how Matter Becomes  
Imagination**

Gerald M. Edelman, Nobel Laureate, Director of the Neurosciences Institute and President  
of Neurosciences Research Foundation, Professor and Chairman of the Department of  
Neurobiology, The Scripps Research Institute, USA

5:30 p.m.

**Welcome cocktail and networking**

## Friday, 15 September

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9:00 a.m. / 12:15 p.m. **Scientific session 2 - Main topic I : New Discoveries Defining Complexity / Moderator : Dame Julia Higgins**

9:00 / 9:30 a.m. **Searching for Simplicity in Complexity; Growth, Innovation, Economies of Scale, and the Pace of Life from Cells to Cities** Geoffrey West, President and Distinguished Professor, Santa Fe Institute, USA

9:40 / 10:10 a.m. **Understanding and Managing Planetary Complexity** John Schellnhuber, Founding Director, Potsdam Institute for Climate Impact Research, Professor at Potsdam and Oxford Universities, Distinguished Science Adviser of the Tyndall Centre for Climate Change Research, UK

10:20 / 10:30 a.m. **Break**

10:30 / 11:00 a.m. **Why Physics is Easy and People are Hard** Ian Hacking Professor Emeritus, Department of Philosophy, University of Toronto, Canada; Professeur au Collège de France, Paris, France

11:00 / 12:15 p.m. **Discussion and short presentations**

12:30 / 1:30 p.m. **Working lunch**

**Round Table : 6 short presentations**

1:30 / 2:30 p.m. **Keynote Lecture II : Towards a Neuroscience of the Capable Person : Unity, Diversity and Oneself as Another** Jean-Pierre Changeux, Professeur au Collège de France, Professor & Chairman of the Department of Neurosciences at the Pasteur Institute, Paris, France

2:30 / 6:00 p.m. **Scientific session 3 - Main topic II : Origin and Migrations of Modern Humans | Moderator : Dame Julia Higgins**

2:30 / 3:00 p.m. **Human Migrations in Prehistory – the Cultural Record** Ofer Bar-Yosef, Professor of Anthropology at Harvard and Curator of Paleolithic Archaeology, Peabody Museum, Harvard, USA

3:10 / 3:20 p.m. **Break**

3:20 / 3:50 p.m. **The Origins of Modern Humans: Linguistic Issues** Bernard Victorri, Director of research CNRS, Lattice Laboratory, France

4:00 / 4:30 p.m. **A Genetic View of Human Origins** Svante Pääbo, Director, Department of Genetics, Max Planck Institute for Evolutionary Anthropology, Leipzig, Germany

4:40 / 6:00 p.m. **Discussion and short presentations**

/ 7:00 p.m. **Cultural event and Gala dinner**

## PROGRAM

### Saturday, 16 September

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#### *Scientific session 4*

9:00 a.m. / 10:30 a.m. **Workshops (parallel sessions)**

9:00 / 10:30 a.m. **Workshop 1: Dialogue driven by political instruments and respecting academic autonomy**

Chair : Ruth Dreifuss, Former Swiss Federal Councillor and former President of the Swiss Federal Council

9:00 / 10:30 a.m. **Workshop 2: Dialogue driven by academic institutional governance**

Chair : Georges Haddad, Director, Division of Higher Education, UNESCO, Honorary President, University of Paris 1, Panthéon–Sorbonne, Paris, France

9:00 / 10:30 a.m. **Workshop 3: Dialogue driven through education**

Chair : Richard R. Ernst, Nobel Laureate, Professor Emeritus of the Swiss Federal Institute of Technology Zürich

10:30 / 10:50 a.m. **Break**

10:50 / 12:00 a.m. **Feedback from workshops and General Discussion**

12:00 / 12:30 p.m. **Concluding Lecture : What have we learnt and where do we go from here?  
A perspective for the 2008 Symposium**

Dame Julia Higgins, Professor of Polymer Sciences at Imperial College, London, Foreign Secretary and Vice President of the Royal Society, UK

12:30 / 13:30 p.m. **Farewell buffet**