

Call for Applications – Please Circulate

# ISSSEO—International Summer School in Social and Ecological Ontology

## UNDERSTANDING SYSTEMS

Castello Tesino and Cinte Tesino, Italy – July 5-9, 2010

Understanding and managing systems are complementary phases of an informed decision making process. ISSEO 2010 aims at providing new intellectual tools for developing a culture of sustainability.

Modern science relies on an essentially analytic strategy. Different sciences have been developed in order to efficaciously segment the whole of reality into classes of more or less uniformly connected phenomena. This *divide et impera* (divide and rule) strategy has proved immensely successful, at least for some regions of reality. Other regions have proved more refractory, for a number of serious reasons. The first is that different regions may require different types of causation, some of which are still unknown, or only partially known. A second reason is that for some regions of reality the analytic strategy of breaking items down into pieces does not work properly. These regions contain items that depend not only on their parts, but also on the whole that results from them, and eventually also on higher-order wholes of which they are parts (e.g., organisms, communities).

Admittedly, our understanding of non-fragmentable items is still deficient. Otherwise stated, there is no denying that a properly developed method of synthesis needs to be developed. The availability of both strategies (analytic and synthetic) will enable the development of a more articulated, integral, respectful and responsible vision of the world.

The most advanced synthetic methodology actually available is represented by system theory, a theory that during the past fifty years has enjoyed alternating phases of tumultuous development and apparent decline. Broadly speaking, a system is a dynamical whole able to maintain its working conditions. The main result achieved by this preliminary understanding of a system has been the proof that the system as a whole is defined by properties *not pertaining to any of its parts* – a patently *non-reductionist* view.

Fabio Caporali

- The Big Framework: from Ecology to Ethics
- The Nature of Social -Ecological-Systems
- International Agreements towards Sustainability
- Modelling the Decision Making Process

Jesper Hoffmeyer

- Biosemiotics: A theory of Life's creative agency
- A world of things becomes a world of signs. On relative being
- From 'naked ape' to 'symbolic species': The evolutionary growth of semiotic freedom
- Science and religion: A new Approach to a Theory of Meaning

Roberto Poli

- A First Introduction to Complex Systems
- Self-referential Systems
- Anticipatory Systems
- System Theory and Levels of Reality

Robert Ulanowicz

- Newton and Darwin: Twin Pillars of Science
- Whence Change?: A World of Radical Uncertainty
- Adventitious Processes: In Partnership with Law?
- Process Ecology: A Lens through Which to View Nature

Notes for applicants:

1. People wishing to participate should send an e-mail message to [roberto.poli@soc.unitn.it](mailto:roberto.poli@soc.unitn.it) before 30 April 2010, submitting their *curriculum vitae* and a short statement of interest (about 1 page).
2. Notification of acceptance and detailed program will be provided in due course.
3. Attendance to the school will be limited to about 30 participants.
4. Lodging and meals will be offered by the organization.
5. All lectures will be in English. Each speaker will give 4 lectures, with ample time for discussion.
6. The lectures will be given in the conference room of the *Centro Studi Alpino della Università della Toscana nell'Alto Piano del Tesino*, starting July 5, at 9 a.m.