

## INTAS Seminar Vienna, Vienna (February 5-10, 2003)

### Participants:

Vladimir Arshinov  
Tatjana Belous  
Vladimir Budanov  
John Collier  
Yagmur Denizhan  
Irina Dobronravova  
Günther Ellersdorfer  
Christian Fuchs  
Wolfgang Hofkirchner  
Bert Klauninger  
Yuri Melkov  
Franz Ofner  
Natalya Savicheva  
Vjacheslav Voitsekhovich  
Doris Zeilinger

The aim of this meeting was the co-ordination of the work concerning the subtasks 1.3., 3.1. and 3.3 of the project. The further schedule was discussed, joint papers between members of different teams were planned. Talks on issues concerning these subtasks were given and the questions raised were discussed:

Irina Dobronravova: The Becoming of Ontological and Epistemological Foundations for New Methodological Norms  
Yuri Melkov: From Explanation to Understanding  
Tatjana Belous: The Standard Conceptions of Explanation and Problems of their Applicability in the Non-Linear Area of Research  
Wolfgang Hofkirchner: Information and Self-Organisation  
Christian Fuchs: Co-operation in Complex, Self-organising Systems

On February 7-9 the participants attended the International Nonlinear Science Conference 2003 (INSC 2003) [**bitte Link zu <http://insec2003.societyforchaostheory.org/> machen**]. Some participants held talks at the conference and a symposium on „Foundations of Self-Organisation“ took place.

### Contributions:

#### February 7th:

Christian Fuchs: Dialectical Materialism and the Self-Organisation of Matter  
Vjacheslav Voitsekhovich: The Philosophical Bases of the Theory of Evolutionary Systems

#### February 9th:

Symposium „Foundations of Self-Organisation“.

Convenors: Christian Fuchs and Wolfgang Hofkirchner

#### About the session:

Since the sixties and the seventies, the disciplines of science have been increasingly focussing on self-organisation and complexity studies. Although interdisciplinarity is one of the main characteristics of self-organisation theory, the approaches are rather scattered and a unified

theory of self-organisation remains to be established. The aim of this session is to explore foundations of such a yet-to-be-developed unification. Topics to be covered in this session include: the exploration of the philosophical relationship of self-organisation theory and classical, modern and postmodern philosophy, the relationship of information and self-organisation, differences and similarities between physical, biological and social self-organisation

Contributions:

Vladimir Arshinov and Vladimir Budanov: Cognitive Foundations of Synergetics

John Collier: Why Self-Organization and Emergence are Linked

György Darvas: The Arrows of Symmetry, Entropy and Orderedness in Self-organising Systems

Bert Klauninger: An Onto-Epistemological Model of Cognition

Elohimjl: Weltanschauungen and Perspectivism Derived from Bertalanffy's Thinking May Help Humans to Self-organize their Role on Earth

Wolfgang Hofkirchner: A Unified Theory of Information (UTI) requires a Unified Theory of Self-Organization