

Friday, November 11, 2011

Foyer, 07:30–08:15

Registration

Large Ceremonial Hall, 08:15–08:30

Welcome Addresses from
Humberto R. Maturana (Video Message)
and the Austrian Ministry of Science and Research
(Moderation: Karl H. Müller)

08:30–09:30

Opening Lecture for both Conferences
(Chair: Gerhard Grössing)

Yves Couder PARIS

A Case of Wave-Particle Duality at Macroscopic Scale,
Quantum-like Behaviours Emerging out of Memory
Driven Trajectories

Conference I

Emergent Quantum Mechanics

Small Ceremonial Hall, 09:45–11:45

Chair: Gerhard Grössing
Introduction
09:50–10:35

Stephen Adler PRINCETON
KEYNOTE LECTURE
Quantum Theory as an Emergent
Phenomenon: Foundations and
Phenomenology
10:35–11:10

Bei-Lok Hu COLLEGE PARK
Emergence, Gravity and
Thermodynamics
11:10–11:45

Hans-Thomas Elze PISA
Quantum-Classical Hybrid
Dynamics

Small Ceremonial Hall, 12:00–13:00

Chair: Theo Nieuwenhuizen
12:00–12:35

Mark Davidson PALO ALTO
A Study of the
Lorentz-Dirac Equation in
Complex Space-Time ...
12:35–13:00

Catalina Curceanu FRASCATI
Experimental Tests of Quantum
Mechanics

Conference II

Self-Organisation in Natur and Society

Large Ceremonial Hall, 09:35–12:45

Chair: Karl H. Müller
KEYNOTE LECTURES

Albert-László Barabási
BOSTON

Network Science: From the
Web to the Cell
10:35–11:35

John Holland SANTA FE
Steering Complex Adaptive Systems
11:45–12:45

Didier Sornette ZÜRICH
What percentage of our
ancestors were men? The most
underappreciated fact about men!

Large Ceremonial Hall, 14:00–16:00

Chair: Albert Müller
14:00–14:40

Dirk Baecker FRIEDRICHSHAFEN
Complexity and Recursivity in Brain,
Mind, and Culture
14:40–15:20

Ranulph Glanville LONDON
Heinz von Foerster, Artist
15:20–16:00

Hans-Rudi Fischer HEIDELBERG
Der anamorphotische Blick

Friday, November 11, 2011

Conference I

Small Ceremonial Hall, 14:30–16:05

Chair: Ángel S. Sanz
14:30–15:05

Garnet Ord TORONTO
Quantum Phase from the Twin
Paradox
15:05–15:40

Gerhard Grössing VIENNA
The Quantum as an
Emergent System
15:40–16:05

John Bush CAMBRIDGE
Hydrodynamic Quantum Analogues

Small Ceremonial Hall, 16:20–18:50

Chair: Hans-Thomas Elze
16:20–16:45

Marek Czachor GDANSK
Regularized QFT ... a Quantum
Weak Law of Large Numbers
16:45–17:10

Richard D. Bateson LONDON
A Causal Net Approach to
Relativistic Quantum Mechanics
17:10–17:35

Felix Finster REGENSBURG
Quantum Mechanics in the Frame-
work of Causal Fermion Systems

Conference II

Large Ceremonial Hall, 16:15–19:45

Chair: Alexander Riegler
16:15–18:15

Panel with
Dirk Baecker FRIEDRICHSHAFEN
Jan Müggenburg LÜNEBURG
Claus Pias LÜNEBURG (Video)

18:30–19:45

– for both conferences –

Self-Reference and
(Non-)Trivialization. The Social
Impact of Cybernetic Concepts

Presentation

of new books by
Gordon Pask,
J. Rogers Hollingsworth,
Bernard Scott,
Karl H. Müller
and a Special Issue of
Cybernetics and Human Knowing
on Heinz v. Foerster

17:35–18:00

Mark J. Everitt CAIRO
Measurement as Emergent
Quantum Phenomena

Saturday, November 12, 2011

Conference I

Emergent Quantum Mechanics

Small Ceremonial Hall, 09:00–10:35

Chair: Bei-Lok Hu
09:00–09:35

Edward Nelson PRINCETON
Review of Stochastic Mechanics
09:35–10:10

Piotr Garbaczewski OPOLE
Probabilistic Whereabouts of the
'Quantum Potential'
10:10–10:35

Ana Maria Cetto MEXICO
Quantization as an Emergent
Phenomenon due to the Matter-
Zeropoint Field Interaction

Conference II

Self-Organisation in Natur and Society

Large Ceremonial Hall, 09:00–10:30

Chair: Ranulph Glanville
09:00–09:45

Louis H. Kauffman CHICAGO
What is an Object that a Person
might know It and a Person that
She might know an Object?
09:45–10:30

V.I. Yukalov DUBNA
Self-organization in Nature and
Society as Decision Making

Saturday, November 12, 2011

Conference I

Small Ceremonial Hall, 10:45–12:20

Chair: GianCarlo Ghirardi
10:45–11:20

Basil Hiley LONDON
Process, Clifford Algebras and
'Weak Values'
11:20–11:55

Maurice de Gosson VIENNA
Schrödinger's Equation is
Classical. Cheers!

11:55–12:20

Ángel S. Sanz MADRID
Quantumness beyond Quantum
Mechanics

Small Ceremonial Hall, 14:00–15:25

Chair: Andrei Khrennikov
14:00–14:35

Guido Bacciagaluppi ABERDEEN
Non-equilibrium in Nelsonian
Mechanics
14:35–15:00

Mike Towler CAMBRIDGE
Approach to Quantum Equilibrium
in de Broglie-Bohm Theory
15:00–15:25

Helmut Rauch VIENNA
Particle or/and Wave Features in
Neutron Interferometry

Small Ceremonial Hall, 15:45–18:10

Chair: Maurice de Gosson
15:45–16:10

Dieter Schuch FRANKFURT
Nonlinear Quantum Mechanics,
Complex Classical Mechanics ...
16:10–16:35

Herbert Schwabl VIENNA
A Classical Framework to
Explain Quantization
16:35–17:00

Manfried Faber VIENNA
Particles as Stable Topological
Solitons
17:00–17:25

Werner A. Hofer LIVERPOOL
A Model of Extended Electrons
17:25–18:10

Lee Smolin WATERLOO
KEYNOTE LECTURE
A Real Ensemble Interpretation of
Quantum Mechanics

Conference II

Large Ceremonial Hall, 10:45–12:15

Chair: Didier Sornette
10:45–11:30

Günter Haag STUTTGART
Synergetics Twenty Years After.
A Critical Assessment
11:30–12:15

Pei Ling Lai TAIWAN
Alfred Inselberg TEL AVIV
Artificial Neural Networks:
The Origin of the Species at BCL

Large Ceremonial Hall, 14:00–12:15

Chair: Paul Pangaro
14:00–14:40

Paul Schröder
PHILADELPHIA
Community Self-Discovery:
Identities and Complexity
14:40–15:20

Bernard Scott SWINDON
Heinz von Foerster: Contributions
to Psychology
15:20–16:00

Stuart A. Umpleby
WASHINGTON
Second Order Science: An Example
of Emergence in Social Systems

Large Ceremonial Hall, 16:15–19:45

Chair: Josef Mitterer
16:15–16:55

S.J. Schmidt MÜNSTER
Self-Organization of
Communication
16:55–17:35

John Lochhead AMHEARST
The No-Crisis Crisis in Radical
Constructivism
17:35–18:15

Theo Hug INNSBRUCK
Constructing an Archive
18:35–19:45

A Film by **Peter Krieg** on
Ernst von Glasersfeld
(with an Introduction by
Josef Mitterer, Thomas
Himmelfreundpointner
and John Lochhead)

Sunday, November 13, 2011

Conference I

Emergent Quantum Mechanics

Small Ceremonial Hall, 09:00–10:35

Chair: Gerhard Grössing
09:00–09:45

Gerard 't Hooft UTRECHT
KEYNOTE LECTURE
Quantum Mechanics from
Classical Logic
09:45–10:10

Giuseppe Vitiello SALERNO
Connes' Noncommutative Spectral
Geometry and the Seeds of
Quantization
10:10–10:35

Fabio Scardigli TAIPEI
Emergent Lorentz Symmetry in
Quantum Mechanics and Doubly
Special Relativity

Small Ceremonial Hall, 10:45–12:20

Chair: Ana María Cetto
10:45–11:20

José M. Isidro VALENCIA
A Thermodynamic Approach to
Emergent Quantum Mechanics
11:20–11:55

Lajos Diósi BUDAPEST
Coexistence of Classical
Continuum and Quantum Theory
11:55–12:20

Alexander Davydov ROCKVILLE
Wave-Particle Duality in Classical
Mechanics

Small Ceremonial Hall, 14:00–15:35

Chair: Lajos Diósi
14:00–14:35

Andrei Khrennikov VÄXJÖ
Quantum Mechanics as Theory of
Classical Random Signals: The
Problem of (Anti-)Bunching
14:35–15:10

Christof Wetterich HEIDELBERG
Quantum Fermions from
Classical Statistics
15:10–15:35

Alexander Burinskii MOSCOW
What Tells Gravity on Emergence
of Quantum Theory?

Conference II

Self-Organisation in Natur and Society

Large Ceremonial Hall, 09:00–10:30

Chair: Stuart A. Umpleby
09:00–09:45

Alfred Inselberg TEL AVIV
Parallel Coordinates ... are better
than they look
09:45–10:30

Paul Pangaro PALO ALTO
Invitation to Recursioning. Heinz
von Foerster and Cybernetic
Praxis

Large Ceremonial Hall, 10:45–12:15

Chair: Bernard Scott
10:45–11:30

Pille Bunnell TORONTO
Chiaroscuro: Living the
Ephemerality of Distinctions and
Domains
11:30–12:15

Karl H. Müller VIENNA
A Short Outline of the
New Science of Cybernetics

Large Ceremonial Hall, 14:00–16:00

Chair: Graham Barnes
14:00–14:40

John Mingers KENT
Explanatory Mechanisms: The
Contribution of Critical Realism
and Systems Thinking/Cybernetics
14:40–15:20

Bruce Clarke STANFORD
The Self-Organizing Classroom:
Documenting Foerster's BCL
Pedagogy, 1968–1974
15:20–16:00

Tatiana Medvedeva
NOVOSIBIRSK
Four Views of Social Systems and
Four Methods for Describing Them

Sunday, November 13, 2011

Conference I

Small Ceremonial Hall, 15:45–18:00

Chair: Manfred Faber
15:45–16:20

Vitaly D. Rusov ODESSA
Quantization in Relativistic
Classical Mechanics
16:20–16:45

Agung Budiyo SAITAMA
Statistical Violation of
Hamilton's Principle
16:45–17:10

Louis H. Kauffman CHICAGO
Discrete Physics and the
Emergence of Quantum Mechanics
17:10–17:35

Petr Hajicek BERNE
Reformed Quantum Mechanics
17:35–18:00

Theo Nieuwenhuizen
AMSTERDAM
Elements of a Sub-Quantum Theory

Conference II

Large Ceremonial Hall, 16:15–19:00

Chair: Hans Rudi Fischer
16:15–16:55

Graham Barnes STOCKHOLM
I Can Let My Soul Soar
16:55–17:35

Lucas Pawlik VIENNA
Heinziaden
17:35–18:15

Ernst Weichselbaum
VIENNA
Organisation diesesseits von
Macht und Kontrolle
18:15–19:00

Albert Müller
Paul Pangaro et al.
The Viennese Archives of
Heinz von Foerster
and Gordon Pask:
Current Status,
Future Perspectives

free admission !

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Heinz von Foerster 100

Heinz von Foerster, November 13th, 1911– October 2nd, 2002

5th International Heinz von Foerster Congress

Conference I

Emergent Quantum Mechanics

Conference II

Self-Organization and Emergence

November 11th – 13th, 2011

University of Vienna
Main Building
Dr. Karl-Lueger-Ring 1
A-1010 Vienna