



5<sup>th</sup> VIENNA CENTRAL EUROPEAN SEMINAR  
ON PARTICLE PHYSICS AND QUANTUM FIELD THEORY

November 28 - 30, 2008

HIGHLIGHTS IN  
COMPUTATIONAL QUANTUM FIELD THEORY

PROGRAM

Lecture Hall: "Großer Hörsaal Materialphysik"

Strudlhofgasse 4, 3<sup>rd</sup> floor, 1090 Vienna

Nov. 28, 2008, Friday

09:00 - 09:05	<i>H. Hüffel</i> (Vienna)	Opening Address
09:10 - 09:55	<i>M. Seymour</i> (CERN)	Monte Carlo simulation of collisions at the LHC
10:00 - 10:45	<i>N. Glover</i> (Durham)	Perturbative QCD for the LHC
10:50 - 11:20		<b>COFFEE</b>
11:20 - 12:05	<i>J. Vermaseren</i> (Amsterdam)	Some algebraic methods in Field Theory
12:10 - 15:00		<b>LUNCH</b>
15:00 - 15:20	<i>K. Hasegawa</i> (Zeuthen)	Automatic dipole subtraction
15:25 - 15:45	<i>T. Reiter</i> (Amsterdam)	Precise NLO Predictions for the LHC with GOLEM
15:50 - 16:10	<i>P. Maierhofer</i> (Karlsruhe)	Four-loop tadpoles and their applications
16:15 - 16:45		<b>COFFEE</b>
16:45 - 17:30	<i>T. Lippert</i> (Jülich)	Advancements in Simulations of Lattice Quantum Chromodynamics
17:35 - 18:55	<i>S. Krieg</i> (Wuppertal)	Light Hadron Spectrum with light dynamical quarks
18:00 - 18:20	<i>J. Ghiglieri</i> (Milano)	Static Quark-Antiquark pairs at finite temperature

18:30 - 19:00

**DISCUSSION SESSION**

19:30 - 20:30

*M. Creutz* (Brookhaven)

**PUBLIC LECTURE: Quarks, Gluons, and Lattices**

## Nov. 29, 2008, Saturday

09:00 - 09:45	<i>D. Kranzlmüller</i> (Munich)	Grids in Europe - A Computing Infrastructure for Science
09:50 - 10:35	<i>K. Anagnostopoulos</i> (Athens)	Probing Non-Perturbative String Dynamics Using Monte Carlo Simulations
10:40 - 11:10		<b>COFFEE</b>
11:10 - 11:30	<i>M. Joergler</i> (Graz)	Bethe-Salpeter-equation studies of meson properties
11:35 - 11:55	<i>M. Huber</i> (Graz)	Symbolic Derivation of Dyson-Schwinger Equations using Mathematica
12:00 - 12:20	<i>S. Ilijic</i> (Zagreb)	Canonical active Brownian motion and bifurcation phenomena
12:25 - 15:00		<b>LUNCH</b>
15:00 - 15:45	<i>M. Creutz</i> (Brookhaven)	Minimally doubled chiral fermions
15:50 - 16:10	<i>A. Tsapalis</i> (Athens)	Nucleon deformation from Lattice QCD
16:15 - 16:45		<b>COFFEE</b>
16:45 - 17:05	<i>D. Mohler</i> (Graz)	Efficient sources for spectroscopy of excited mesons in lattice QCD
17:10 - 17:30	<i>J. Wuilloud</i> (Muenster)	One flavour QCD
17:35 - 17:55	<i>R. Höllwieser</i> (Vienna)	Center Vortices, Confinement and Chiral Symmetry Breaking

18:00 - 18:30		<b>DISCUSSION SESSION</b>
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18:30 - 19:15		<b>POSTER SESSION</b>
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19:30 - ... **RECEPTION**

## Nov. 30, 2008, Sunday

09:30 - 10:15	<i>Ch. Gattringer</i> (Graz)	QCD Phase Transition and Fermionic Boundary Conditions
10:20 - 11:05	<i>O. Philipsen</i> (Muenster)	Exploring the QCD phase diagram on the lattice
11:10 - 11:40		<b>COFFEE</b>
11:40 - 12:00	<i>G. Endrodi</i> (Budapest)	The curvature of the QCD phase transition line
12:05 - 12:50	<i>P. de Forcrand</i> (Zurich)	QCD at finite temperature and density in the strong coupling limit
12:55 - 13:00	<i>H. Hüffel</i> (Vienna)	Closing Remarks

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