



4th VIENNA CENTRAL EUROPEAN SEMINAR
ON PARTICLE PHYSICS AND QUANTUM FIELD THEORY

November 30 - December 02, 2007

"COMMUTATIVE AND NONCOMMUTATIVE QUANTUM
FIELDS"

PROGRAM

Lecture Hall: "Großer Hörsaal Materialphysik"
Strudlhofgasse 4, 3rd floor, 1090 Vienna

Nov. 30, 2007, Friday

09:00 - 09:05	<i>H. Hüffel</i> (Vienna)	Opening Address
09:10 - 09:55	<i>V. Rivasseau</i> (Paris)	Why Renormalizable Noncommutative Quantum Field Theories?
10:00 - 10:45	<i>R. Szabo</i> (Edinburgh)	UV/IR Duality and Matrix Models of Noncommutative Field Theory
10:50 - 11:20		COFFEE
11:20 - 11:40	<i>A. Tanasa</i> (Bucuresti-Magurele)	Feynman amplitudes in renormalizable non-commutative quantum field theory
11:45 - 12:30	<i>P. Schupp</i> (Bremen)	Noncommutative Gravity
12:35 - 12:55	<i>H. Steinacker</i> (Vienna)	4D Gravity from noncommutative gauge theory
13:00 - 14:40		LUNCH
14:40 - 15:00	<i>J. Trampetic</i> (Zagreb)	Noncommutative gauge field theory
15:05 - 15:25	<i>J. Lukierski</i> (Wroclaw)	Towards noncommutative κ -deformed field theory
15:30 - 15:50	<i>C. Levy</i> (Marseille)	Spectral Action on Noncommutative Torus
15:55 - 16:15	<i>T. Krajewski</i> (Marseille)	Quantum field theory on a projective module
16:20 - 16:50		COFFEE
16:50 - 17:35	<i>D. Bahns</i> (Hamburg)	On renormalization in noncommutative field theory
17:40 - 18:00	<i>Ch. Dehne</i> (Leipzig)	On the path integral in non-commutative QFT
18:05 - 18:25	<i>A. de Goursac</i> (Münster)	Vacuum configurations for renormalizable noncommutative scalar field theory
18:30 - 19:00		DISCUSSION SESSION
19:30 - 20:30	<i>A.P. Balachandran</i> (Syracuse)	PUBLIC LECTURE: Spacetime and noncommutative physics

Dec. 01, 2007, Saturday

09:00 - 09:20	<i>W. Dybalski</i> (Göttingen)	Harmonic analysis of local operators in massless free field theory
09:25 - 09:45	<i>J.-Ch. Wallet</i> (Orsay)	Recent results in gauge theories on noncommutative Moyal spaces
09:50 - 10:10	<i>S. Weiß</i> (Freiburg)	Deformation Quantization of Principal Fibre Bundles
10:15 - 10:35	<i>W. Bietenholz</i> (Zeuthen)	Simulating $U(1)$ Gauge Theory on Non-Commutative Spaces
10:40 - 11:10		COFFEE
11:10 - 11:30	<i>A. Chatzistavrakidis</i> (Athens)	Consistent Dimensional Reduction over Coset Spaces
11:35 - 11:55	<i>N. Nikolov</i> (Sofia)	Cohomological analysis of Epstein-Glaser renormalization
12:00 - 12:20	<i>S. Kürçüoğlu</i> (Hannover)	Quantum Aspects of the Noncommutative Sine-Gordon Model
12:25 - 12:45	<i>P. Martinetti</i> (Roma)	Metric interpretation of gauge fields in noncommutative geometry
12:50 - 14:25		LUNCH
14:25 - 14:45	<i>M. Dimitrijevic</i> (Alessandria)	Field Theory on Nonanticommutative Superspace
14:50 - 15:10	<i>M. Kreuzer</i> (Vienna)	Non-commutativity and effective actions in curved space-time
15:15 - 16:00	<i>Sergio Doplicher</i> (Rome)	Quantum Spacetime and Noncommutative Geometry
16:05 - 16:35		COFFEE
16:35 - 17:20	<i>G. Lechner</i> (Vienna)	Wedge-local Quantum Fields and Interaction
17:25 - 18:10	<i>D. Buchholz</i> (Göttingen)	Local and Covariant Deformations of Wedge Algebras in Quantum Field Theory
18:15 - 18:45		DISCUSSION SESSION
18:45 - 19:15		POSTER SESSION
19:30 - ...		RECEPTION

Dec. 02, 2007, Sunday

09:30 - 10:15	<i>S. Hollands</i> (Cardiff)	Quantum Fields, Curvature, and Cosmology
10:20 - 11:05	<i>P. Roche</i> (Montpellier)	Chern-Simons Quantization of 2+1 Gravity
11:10 - 11:40		COFFEE
11:40 - 12:00	<i>A. Tureanu</i> (Helsinki)	Exact Results in Noncommutative QFT: CPT and Spin-Statistics Theorems
12:05 - 12:50	<i>M. Chaichian</i> (Helsinki)	Twisted Poincare Symmetry of Noncommutative QFT
12:55 - 13:05	<i>H. Hüffel</i> (Vienna)	Closing Remarks

Supported by:

The Austrian Federal Ministry for Science and Research

The High Energy Physics Institute of the Austrian Academy of Sciences

The Erwin Schrödinger International Institute of Mathematical Physics

Faculty of Physics, University of Vienna

Vienna Convention Bureau.