

Workshop "Canonical and Quantum Gravity"

Wednesday 24:

J. Nester ``The Hamiltonian of Dynamic Geometry I:

Classical canonical gravity and a covariant Hamiltonian formulation"

J. Nester ``The Hamiltonian of Dynamic Geometry II:

boundary terms, symplectic structure and quasilocal quantities

K. Kuchar

R. Loll ``Solutions for Hamiltonian Lattice Quantum Gravity"

J. Louko ``Hamiltonian thermodynamics of the Schwarzschild black hole"

A. Ashtekar ``Mathematical Problems of Quantum Gravity I"

Thursday 25:

A. Ashtekar ``Mathematical Problems of Quantum Gravity II"

L. Smolin ``Quantum kinematics of the gravitational field I"

L. Smolin ``Quantum kinematics of the gravitational field II"

C. Rovelli ``Computing transition amplitudes in Quantum Gravity"

I - The T-theory"

I. Bengtson "Chiral Actions for Gravity"

B. Bruegman "On the constraint algebra of canonical quantum gravity in the loop representation"

Friday 26:

A. Ashtekar "Mathematical Problems of Quantum Gravity III"

R. Beig "TT tensors and vacuum trapped surfaces I"

R. Beig "TT tensors and vacuum trapped surfaces II"

H. Nicolai "An integrable model of quantum gravity"

K. Kuchar

J. Kijowski "A simple derivation of canonical gravity"

Saturday 27:

P. Hajicek "Quantization of parametrized systems I. Construction of time evolution"

M. Carfora "Some mathematical problems in simplicial quantum gravity I"

J. Goldberg

T. Thiemann ``Loop transforms''

D. Marolf ``A strategy to solve quantum constraints''

Monday 29:

C. Rovelli ``Computing transition amplitudes in Quantum Gravity II - Spin Network States and Quantum Gravity''

C. Rovelli ``Computing transition amplitudes in Quantum Gravity III - Evolution''

P. Hajicek ``Quantization of parametrized systems II. Example: QFT in curved background''

T. Newman ``General Relativity as a theory of surfaces I''

M. Carfora ``Some mathematical problems in simplicial quantum gravity II''

L. Smolin ``Linking quantum gravity and topological quantum field theory: testing the 't Hooft-Susskind holographic hypothesis''

Tuesday 30:

N. O'Murchadha ``The configuration space of spherical gravity I''

N. O'Murchadha ``The configuration space of spherical gravity II''

T. Newman ``General Relativity as a theory of surfaces II''

C. Stornaiolo ``Multisymplectic formalism and Ashtekar's variables"

F. Barbero ``Homogeneous 2+1 Gravity in the Ashtekar Formulation"

A. Higuchi ``Slice dependence of naive ADM-reduction quantization"

Wednesday 31:

J. Jezierski

N. O'Murchadha ``The configuration space of spherical gravity III"

J. Baez

M. Reisenberg "Covariant extension of Ashtekar's theory to degenerate geometries"

J. Lewandowski ``Operators of Quantum Gravity and differential geometry

Participants:

Peter C Aichelburg (Vienna)

Lars Anderson (Stockholm)

Abhay Ashtekar (Pennstate)

Robert Beig (Vienna)

Fernando Barbero (Pennstate)

Ingemar Bengtsson (Stokholm)

Bernd Bruegman (Munich)

Mauro Carfora (SISSA)

Joshua Goldberg (Syracuse)

Petr Hajicek (Bern)

Atsushi Higuchi (Bern)

Bernard S. Kay (York)

Karel Kuchar (Salt Lake City)

Renate Loll (Florence)

Jorma Louko (Milwaukee)

Jose Mourao (Alvagare)

Lee Smolin (Pennstate)

Laszlo Szabados (Budapest)

Carlo Rovelli (Pittsburgh)

Lionel Mason (Oxford)

Don Marolf (Santa Barbara)

James N. Nester (Taiwan)

Ezra Ted Newman (Pittsburgh)

Hermann Nicolai (Hamburg)

Yuriy Obukhov (Moskow)

Niall O'Murchadcha (Cork)

Thomas Thiemann (Pennstate)

Cosimo Stornaio (Naples)