

Section D Quantum Issues

D.1 Quantum General Relativity

Tuesday 13:30-15:30	Clyde I	
13:30	Lee Smolin	The low energy behavior of loop quantum gravity
13:45	Luca Bombelli	Riemannian Statistical Geometry and Semiclassical Quantum Gravity
14:00	J. Lewandowski	Black-Hole Entropy: revised version
14:15	Christian Fleischhack	Representations of the Weyl Algebra in Quantum Geometry: A Status Report
14:30	Alberto Molgado	Group averaging in the (p,q) oscillator representation of $\mathrm{SL}(2, \mathbb{R})$.
14:45	Bianca Dittrich	The Master Constraint Programme: Examples
15:00	Martin Bojowald	Symmetric Quantum Geometry
15:15	Oliver Winkler	Singularity avoidance or "How compact is the world?"
Tuesday 16:00-18:00	Clyde I	
16:00	Jorge Pullin	The consistent discretization approach to the quantization of gravity
16:15	Annalisa Marzuoli	Spin networks as computing machines
16:30	Luisa Doplicher	Propagation kernel techniques for loop quantum gravity
16:45	Robert Oeckl	Quantum general relativity in the general boundary formulation
17:00	Jonathan Engle	Quantum geometry and black hole entropy: inclusion of distortion and rotation
17:15	Chris Van Den Broeck	A semi-classicality criterion for states of quantum geometry
17:30	Emanuele Berti	Black hole quasinormal modes and the area quantum
17:45	Alfio Bonanno	Non-gaussian fixed point in Quantum Einstein Gravity and proper-time flow equations
Thursday 13:30-15:30	Clyde II	
13:30	John R. Klauder	Virtues of Affine Quantum Gravity
13:45	Steven Carlip	A homogeneous early universe from sums over topologies
14:00	Seth A. Major	Quantum Gravity Phenomenology: Discrete Space
14:15	Ruth M. Williams	Scalar fields on triangulated manifolds.
14:30	Ingemar Bengtsson	Geometry of black hole thermodynamics
14:45	Victor Valdaya	Jet-gauge, jet-diffeomorphism groups: unified formulation of gravity and internal interactions
15:00	J. F. Barbero G.	Asymptotics of regulated field commutators for Einstein-Rosen waves
15:15	David Craig	Consistent Quantum Cosmology: Decohering Histories of Recollapsing Universes
Thursday 16:00-18:00	Clyde II	
16:00	Petr Hajicek	Gauge-invariant Hamiltonian dynamics of asymptotically flat spacetimes
16:15	Karel V. Kuchar	Quantum geometry and dynamics of the gravitational collapse
16:30	T. P. Singh	Exact quantum state of collapse and black hole radiation
16:45	R.B. Mann	String-bit Models of 2D Quantum Gravity Coupled to Matter
17:00	Vyacheslav Rychkov	Black hole production in elementary particle collisions: quantum gravity effects
17:15	Allan Joseph M. Medved	Quasinormal Modes versus Quantum Gravity
17:30	M.L. Fil'chenkov	Quantum Cosmology with Rotation, Shear and Acceleration
17:45	Charles H. Wang	Nonlinear quantization of gravity on the constant mean curvature foliation

Section D Quantum Issues

D.2 String and M-theory

Monday 14:00-15:30	Lansdowne	
	14:00 Evgeny Sorokin	A critical dimension in the black-string phase transition
	14:15 Takashi Tamaki	Radionic Non-uniform Black Strings
	14:30 Cristiano Germani	On the quest for a holographic interpretation of the black hole evaporation process
	14:45 Belkis Cabrera Palmer	Counting Supertubes
	15:00 Henriette Elvang	Non-uniqueness of black holes in string theory
	15:15 Sergey Cherkis	Self-dual gravitational instantons without isometries
Monday 16:00-18:00	Lansdowne	
	16:00 Dmitri Gal'tsov	On uniqueness of supergravity p-branes
	16:20 Carlos Herdeiro	Recent Developments concerning Closed Timelike Curves in String Theory
	16:40 Toby Wiseman	Black hole-black string phase transitions in gauge theory
	17:00 Eric Woolgar	AdS/CFT and Uniqueness of the AdS Soliton Spacetime
	17:20 Robert Mann	Maximal Mass and Entropy Conjecture Violations in Taub-NUT de Sitter Spacetimes
	17:40 Lee Smolin	Background independent approach to M theory
Tuesday 13:30-15:30	Conference	
	13:30 Harvey Reall	Anti-de Sitter black holes
	13:50 Veronica Hubeny	Holographic Description of Singularities
	14:10 Kengo Maeda	Non-Uniqueness in gauged supergravity theories
	14:30 Mukund Rangamani	Cosmic Censorship in AdS/CFT
	14:50 Thomas Hertog	Towards a Big Crunch Dual
	15:10 Akihiro Ishibashi	Dynamics in anti-de Sitter spacetime

D.3 Quantum Fields in Curved Space-times

Thursday 16:00-18:00	Clyde I	
	16:00 Robert Wald	Perturbative quantum field theory in curved spacetime
	16:20 Stefan Hollands	Conservation of the stress tensor in quantum field theory in curved spacetime
	16:40 Break	
	16:50 Daniel Terno	Geometric entropy
	17:10 Matt Visser	Vortex geometry of the equatorial slice of the Kerr geometry
	17:30 Break	
	17:40 Thomas Roman	Moving Mirrors and stress-tensor fluctuations
Friday 16:00-18:00	Lansdowne	
	16:00 William Unruh	Black Hole Analogs
	16:20 Silke Weinfurter	Massive d'Alembertian equation from a BEC-based analogue model
	16:40 Break	
	16:50 Larry Ford	The Langevin-Raychaudhuri equation as a probe of spacetime geometry fluctuations
	17:10 Brendan Foster	Giving birth to modes: quantum field theory on a growing lattice
	17:30 Break	
	17:40 Shinichi Horata	Anisotropies of the primordial cosmic background curvature