

PRELIMINARY PROGRAM

	Monday, June 22	Tuesday, June 23	Wednesday, June 24	Thursday, June 25	Friday, June 26
8:55 – 9:00	Welcome				
9:00 – 10:10	C. Wetterich Quantum vacuum and cosmology	W. Unruh Analog Gravity	A Starobinsky Inflation: present status and perspectives of future discoveries	V. Frolov Non-singular models of black holes	M. Reuter Functional Renormalization Group
10:10 – 10:30	Coffee Break				
10:30 – 11:10	I. Antoniadis, Scale hierarchies in particle physics and cosmology	A. Fabbri Analog Hawking radiation in Bose-Einstein condensates	R. Durrer The Cosmic Microwave Background and Quantum Physics	E. Mottola Dark Energy and Condensate Stars: Surface Tension and Negative Pressure in Gravitational Collapse	A. Mazumdar Ground State of Gravity
11:10 – 11:50	P. Anderson Particle production, backreaction, and the validity of the semiclassical approximation	R. Schuetzhold On the partner particles for black hole evaporation	C. Kiefer Can effects of quantum gravity be observed in the cosmic microwave background?	J. Serreau Infrared dynamics of interacting scalar fields in de Sitter space	P. Lavrov Remarks on the average effective action in Functional Renormalization Group approach
11:50 -12:30	J. Buchbinder Quantum Equivalence of Massive Antisymmetric Tensor Field Models in Curved Space-Time	S. Reynaud Inertia of mirrors in vacuum	I. Argullo Loop quantum cosmology and the CMB	E. Akhmedov On strong quantum corrections in strong background fields, in general, and in de Sitter space, in particular	I. Shapiro Renormalization and stability in higher derivative models of quantum gravity
12:30 – 14:00	Lunch Break				
14:00 – 14:40	A. Zhitnitsky The dynamics of the topological gauge sectors in a time-dependent curved background	M. Visser Why are Casimir energy differences so often finite?	M. Maggiore Dark energy and nonlocal gravity	T. Prokopec De Sitter breaking from gravitons at the one loop level	D. Litim Asymptotic safety - from gauge theories to quantum gravity
14:40 -15:20	D. Glavan Quantum backreaction of a very light non-minimally coupled scalar and Dark Energy	E. Elizalde Zeta functions, the Chowla-Selberg formula, and the Casimir effect	P. Mazur Model independent constraints on correlation functions in CMB and on the early galaxy distribution from CFT	D. Grumiller Holography in flat space	T. Turgut Interacting bosons in a static background metric
15:20 – 15:40	Coffee Break				
15:40 – 16:10	Discussion on Inflation and Vacuum Energy	F. Michel Hawking radiation in the presence of high energy dispersion and application to universal horizons	R. Carballo-Rubio Using the cosmological constant to learn about spacetime	Discussion on Quantum Effects in Gravitational Collapse and in de Sitter Space	General Discussion on Quantum Gravity. Concluding Remarks
16:10 – 17:10		Discussion on Analog Gravity and the Hawking Effect	Discussion on Cosmological Term and Quantum Corrections in the CMB		