

WORKSHOP ON GRAVITATION, COSMOS AND THE QUANTUM

May 5, 2007 – May 6, 2007
320 Whitmore Lab

Sponsored by the Center for Fundamental Theory,
Institute for Gravitation and the Cosmos, The Pennsylvania State University

WORKSHOP PROGRAM

Saturday, May 5

SESSION ON QUANTUM COSMOLOGY

Chair: Stephon Alexander

9:00 – 10:00	Jim Hartle – "Quantum Mechanics and Quantum Gravity"
10:00 – 10:30	Discussion
10:30 – 11:00	Coffee Break
11:00 – 12:00	Robert Brandenberger – "Resolution of Cosmological Singularities and Implications for Early Universe Cosmology"
12:00 – 12:30	Discussion
12:30 – 2:00	Lunch Break

SESSION ON SINGULARITIES IN QUANTUM SPACE-TIMES

Chair: Martin Bojowald

2:00 – 3:00	Gary Horowitz – "Singularities in String Theory"
3:00 – 3:30	Discussion
3:30 – 4:00	Coffee Break
4:00 – 5:00	Abhay Ashtekar – "Quantum Extensions of Classically Singular Space-Times"
5:00 – 5:30	Discussion

Sunday, May 6

SESSION ON SUPERGRAVITY AND BLACK HOLES

Chair: Murat Günaydin

9:00 – 10:00	Samir Mathur – "How Fuzzballs Resolve the Black Hole Information Paradox"
10:00 – 10:30	Discussion
10:30 – 11:00	Coffee Break
11:00 – 12:00	Radu Roiban – "Is Perturbative N=8 Supergravity Finite?"
12:00 – 12:30	Discussion
12:30 – 2:00	Lunch Break
2:00 – 3:00	General discussion about open problems and future directions (Coordinator: Abhay Ashtekar)