

7th PACIFIC COAST GRAVITY MEETING
HARVEY MUDD COLLEGE
March 8-9, 1991

Sessions will be held in Galileo-McAlister lecture hall. All talks are scheduled for 12 minutes plus 5 minutes for discussion.

Friday

9:00 - 9:30	Registration at Galileo-McAlister
9:30 - 12:25	Mostly Quantum Gravity
John McLaughlin	Examples of the Vilkovisky-DeWitt Effective Action in One-Loop Quantum Gravity
Herbert W. Hamber	Attempts at Understanding Quantum Gravity Using the Lattice Formulation
Corinne Manogue	The Effect of Signature Change on Scalar Field Propagation
Tevian Dray	Scalar Field Quantization in Stationary, Non-Static Spacetimes
Alan Steif	Cosmological Solutions in String Theory

Break

J. Fang	Spin-0 Fields Coupled with Gravity: A consistency formulation
David Garfinkle	Semiclassical Wheeler Wormhole Production
Gary Horowitz	Topology Change in Classical and Quantum Gravity
Laurens D. Gunnarsen	A New Light Cone-Based Approach to Quantum Gravity

12:25 - 1:45 **Lunch**

1:45 - 5:40

Mostly Observations and Experiments

Sasha Buchman	Recent Advances in GPB
Ron Hellings	Lageos III
David Sonnabend	Drag-Free Systems
J. Weber	Gravitational and Neutrino Antennas
Bob Spero	LIGO Status Report and Recent Advances
M. S. Burns	How Many Supernovae Are Needed to Determine q_0 ? A Monte Carlo Simulation
X P. Lubin	The Angular Distribution of the Cosmic Background Radiation

Break

Ken Nordtvedt	Lunar Laser Ranging Revisited—The Non-Null Relativistic Contribution
Bahman Shahid-Saless	Relativistic Effects Arising from the Quadrupole Moment of the Earth
J. H. Gundlach	University of Washington Rotating Source Torsion Balance Experiment
Zhang Pinghua	Reduction of Effective "Spring Constants" Using Gravitational Field Gradients
E. G. Adelberger	Does Antimatter Fall with the Same Acceleration as Ordinary Matter?
M. A. Beilby	Progress Report on the Development of a Rotatable Torsion Balance for a New Test of the Equivalence Principle

6:15

Dinner: Mexican buffet in the Green Room

Saturday

9:00 - 12:15

Mostly Mathematical Relativity

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| Steve Harris | The Generic Condition is Generic |
| John K. Beem | Curvature and Acceleration |
| Viqar Husain | Constants of the Motion for Two-Killing Field Relativity |
| Peter A. Morse | Approximate Diffeomorphism Invariance in the Regge Calculus |
| E. Woolgar | New Demonstration of the Positive Mass Theorem |
| Jim Isenberg | Symmetries of Cosmological Cauchy Horizons |

Break

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| Wei Li | Nonimpulsive Colliding Gravitational Waves with Noncollinear Polarizations |
| A. H. Taub | Interaction of Null Dust Clouds Fronted by Plane Impulsive Gravitational Waves, II |
| Zoltan Perjes | The Simon Moments for Stationary, Asymptotically Flat, Electronic Systems |
| James Hartle | Spacetime Coarse Grainings in Non-Relativistic Quantum Mechanics |
| Kip Thorne | Time Machines: Self destruction and nonunitarity |

12:15 - 1:30

Lunch

1:30 - 5:50

Mostly Cosmology and Astrophysics

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| William A. Hiscock | Gravity, Thin Walls, and Vacuum Decay |
| Kei-ichi Maeda | Inflation in Generalized Einstein Theories |
| Milan Mijic | Postinflationary Universe |
| Bharat Ratra | Is Inflation Fine-Tuned? |
| Clifford M. Will | Coalescing Binary Black Holes: A post-Newtonian approach |
| Gregory Mendell | The Effect of Mutual Friction on the Gravitational Wave Instability in Rapidly Rotating Neutron Stars |
| Richard H. Price | The Relationship of Different Gauge Formalisms for Pulsations of Stellar Models and Black Holes |
| Break | |
| Lee Lindblom | The Two-Potential Formalism for the Pulsations of Rotating Stars |
| Curt Cutler | Post-Newtonian Effects on the Oscillations of Rotating Stars |
| James R. Ipser | The Pulsations of Rapidly Rotating Relativistic Stars: The Cowling approximation |
| Hongya Liu | Spectrum of Black-Hole Resonances |
| Theocharis Apostolotos | The Dynamics of a Collapsing, Rotating Cylindrical Shell: Can rotation always halt the collapse? |
| Eanna Flanagan | The Hoop Conjecture: When do black holes form in highly nonspherical gravitational collapse? |
| Dragoljub Markovic | A Black Hole at the Center of the Sun?: You'll never know until it's too late. |
| Peter Bender | Problems with Rates for Inspiral of Compact Objects to SMBH's in AGN's |