

14th Pacific Coast Gravity Meeting

University of Oregon
March 20-21, 1998

Friday Sessions: Willamette Hall, Room 110
Saturday Sessions: Willamette Hall, Room 100
Talks are 12 minutes, followed by 3 minutes for questions.

FRIDAY

- 8:00: Registration: Willamette Hall Lobby

- Session One: Jim York, Chair
- 9:00: Jim Isenberg, University of Oregon,
"Proving velocity dominated behavior in cosmological spacetimes"
- 9:15: Marsha Weaver, University of Oregon,
"Mixmaster behavior in inhomogeneous cosmological spacetimes"
- 9:30: Beverly Berger, Oakland University,
"The Nature of the Generic Singularity in Cosmological Spacetimes"
- 9:45: Susan Scott, Australian National University,
"FRW models and isotropic Singularities"
- 10:00: Tevian Dray, Oregon State University,
"Octonionic Möbius Transformations"
- 10:15: Corinne A. Manogue, Oregon State University,
"A New Dimensional Reduction Scheme"

- 10:30: Break

- Session Two: Beverly Berger, Chair
- 11:00: Don Witt, University of British Columbia,
"Exotic Cosmologies"
- 11:15: Jim York, University of North Carolina, Chapel Hill,
"Hyperbolic Systems and Constraint Conservation"
- 11:30: Arlen Anderson, Univ. North Carolina Chapel Hill,
"General Relativity as a Hyperbolic Theory of Curvature"
- 11:45: Sharmanthie Fernando, University of Cincinnati,
"Chern Simons gauge theory for gravity in Anti de Sitter space"
- 12:00: Arthur E. Fischer, University of California, Santa Cruz,
"Conformal Superspace and Hamiltonian Reduction of General Relativity"
- 12:15: Charles Torre, Utah State University,
"Symmetry reduction of field theories"

- 12:30: Lunch

- Session Three: Lee Lindblom, Chair
- 2:00: Richard Price, University of Utah,
"Recent Progress in the Analysis of Black Hole Collisions: Initially Moving Holes"
- 2:15: John T. Whelan, University of Utah,
"The Quasi-Stationary Approach to the Binary Inspiral Problem"
- 2:30: Jolien Creighton, Caltech,
"Binary Black Hole Inspiral: the Middle Bit"
- 2:45: Scott A. Hughes, Caltech,
"Relativistic splats: measuring the final merger of compact bodies with gravitational waves"
- 3:00: William Krivan, University of Utah,
"Gravitational perturbations of rotating black holes: Constructing initial data for the Teukolsky equation"
- 3:15: Alcides Garat, University of Utah,
"Gauge Invariant Second Order Perturbation Calculations For Black Hole Collisions"

- 3:30: Break

- Session Four: Richard Price, Chair
- 4:00: Janna Levin, The Center for Particle Astrophysics, UC Berkeley,
"Is the universe infinite or is it just really big?"
- 4:15: Lee Lindblom, Caltech,
"Gravitational Radiation Instability in Hot Young Neutron Stars"
- 4:30: Benjamin J. Owen, Caltech,
"Gravitational Waves From Young Rapidly Rotating Neutron Stars"
- 4:45: Teviet Creighton, Caltech,
"Gravitational waves and the cosmological equation of state"
- 5:00: William A. Hiscock, Montana State University,
"Low Frequency Gravitational Waves from Black Hole MACHO Binaries"
- 5:15: Homer Ellis, University of Colorado at Boulder,
"'Bye, 'Bye Blackhole, Hello Grayhole"

SATURDAY

- 8:30: Refreshments: Willamette Hall Lobby

- Session Five: William Hiscock, Chair
- 9:15: William Pezzaglia, Santa Clara University,
"The Papapetrou equation derived as a geodesic in a non-holonomic Clifford manifold"
- 9:30: Jim Fischer, Oregon State University,
"A New Look at the Ashtekar and Magnon Energy Condition"
- 9:45: Michael Martin, University of Washington,
"Tensor Densities and Gauge Transformations: A Reformulation of Weyl's Unified Field Theory of 1919"
- 10:00: James T. Wheeler, Utah State University,
"Graded Scale Invariance"
- 10:15: Richard A. Trejos, Hill AFB,
"Gravity, Theory and Mathematical Calculation Linking the gravitational Constant with the permeability Constant of Space and Matter"

- 10:30: Break
- Session Six: Arthur Fischer, Chair
- 11:00: Joe Weber, UC Irvine,
"Gravitational Radiation From the Gamma-Ray Bursts"
- 11:15: Ronald Hellings, Jet Propulsion Laboratory,
"The OMEGA Proposal to NASA's MDEX Program"
- 11:30: Kip Thorne, Caltech,
"Quantum Nondemolition Interferometers for LIGO"
- 11:45: Rick Savage, LIGO Project,
"Status of the LIGO project: ready for the detector"
- 12:00: James Hartle, ITP, Santa Barbara,
Discussion of the work of the Committee on Gravitational Physics.
- 12:30: Lunch
- Session Seven: Corinne Manogue, Chair
- 2:15: Patrick R Brady, Caltech,
"Quantum effects in critical spacetimes"
- 2:30: Shane L. Larson, Montana State University,
"Self-Consistent Semi-Classical Black Hole Interiors"
- 2:45: Brett Taylor, Montana State University,
"Stress Energy Tensor of a Spin 1 Field in a Static Spherically Symmetric Spacetime"
- 3:00: Rhett Herman, Radford University,
"A method for calculating the imaginary part of the Hadamard Elementary Function $G^{(1)}$ in static spherically symmetric spacetimes"
- 3:15: Al Agnew, Oregon State University,
"Distributional Modes for Scalar Field Quantization"
- 3:30: Break
- Session Eight: Tevian Dray, Chair
- 4:00: Kristin Schleich, University of British Columbia,
"The Wavefunction of the Universe in Simplicial Gravity"
- 4:15: Simon Ross, University of California Santa Barbara,
"Singularities in wavy strings"
- 4:30 Haisong Yang, UC Santa Barbara,
"Black holes in string theory and the correspondence principle"
- 4:45: James Hartle, ITP, Santa Barbara,
"A Second Law for Histories"

