

Send to Darryl Holm

Caltech 1st

PACIFIC COAST GRAVITY CONFERENCE  
PROGRAM

All sessions are in room 24 Beckman Behavioral Biology Laboratories.

EACH TALK, INCLUDING QUESTIONS AND DISCUSSION, WILL BE RIGIDLY LIMITED TO THE TIMES SHOWN

FRIDAY 1 MARCH: 9:15 AM - 12:45 PM CHAIR - TED NEWMAN

1. Jim Ipser, University of Florida, "Models of Rapidly Rotating Neutron Stars." (30 min)
2. Sam Finn, Caltech, "Slow Motion Approximation for the Calculation of Nonradial g-Mode Pulsations of Relativistic Stars." (15 min)
3. Luc Blanchet, Caltech, "Multipolar Gravitational Radiation from an Isolated System." (30 min)
4. Xiao-He Zhang, Caltech, "Laws of Motion and Precession for Black Holes and Other Bodies." (15 min)
5. Wai-Mo Suen, Caltech, "Multipole Moments for Stationary, Nonasymptotically Flat Systems in General Relativity." (25 min)
6. Judith Arms, University of Washington, "Perturbations of Conservation Laws in Field Theories." (30 min)
7. Pawel Mazur, UCSB, "Black Hole Uniqueness Theorems." (30 min)
8. Wojciech Zurek, Los Alamos, "Statistical Mechanical Derivation of the Entropy of Rotating, Charged Black Holes." (15 min)

FRIDAY MARCH 1 12:45 PM - 2:00 PM

LUNCH

FRIDAY MARCH 1 2:00 PM - 6:30 PM CHAIR - JIM ISENBERG

1. Peter D'Eath, UCSB and Cambridge, "Canonical Quantization of Supergravity." (30 min)
2. Karl Kuchar, University of Utah, "Spacetime Diffeomorphisms in a Canonical Garb." (30 min)
3. Friedrich Hehl, UCLA and Koln, "Torsion Balls: Exact Solutions in a Gauge-Theoretical Model of Gravity." (30 min)

4. Gary Horowitz, UCSB, "Why Should Relativists be Interested in Superstrings?" (30 min)
5. Piotr Amsterdamski, UCSB, "Wave Functions of an Anisotropic Universe." (15 min)
6. Robert Brandenberger, UCSB, "On the Realization of New Inflation." (30 min)
7. Bruce Allen, UCSB, "DeSitter Invariant Vacuum States." (30 min)
8. Jim Hartle, UCSB, "Unruly Topologies." (30 min)
9. Sigurd Sannan, UCSB, "The Hawking Mass in an Asymptotically Open Friedmann Model." (15 min)
10. Joe Hucks, UCSB, "Very General Relativity." (15 min)

FRIDAY 1 MARCH: 6:30 PM - Midnight

6:30 PM - ??? Dinner in restaurants in the town (see list of possibilities in accompanying material).

7:30 PM - Midnight Informal discussion over drinks at Kip Thorne's House, 672 Busch Garden Drive, Pasadena (see map in accompanying material).

SATURDAY 2 MARCH: 8:30AM - 11:30 AM CHAIR - KIP THORNE

1. Henry Hill, University of Arizona, "Progress Report on the Determination of J2 of the Sun Using the Rotational Splitting of Solar Oscillations Detected at SCLERA". (30 min)
2. Frank Estabrook, JPL, "Response Functions of Interferometer Gravitational Radiation Detectors". (30 min)
3. Peter Bender, JILA - University of Colorado, "Sources of Gravitational Waves with Frequencies Between One Microhertz and One Hertz." (30 min)
4. Dieter Hils, JILA - University of Colorado, "Expected Sensitivity and Frequency Resolution for Laser Gravitational Wave Antennas in Space." (30 min)
5. Members of Caltech and Glasgow Gravity Groups: "Progress Report on the West Coasts' Interferometric Gravitational Wave Detectors." (45 min)

Emil Mottola



SATURDAY 3 MARCH: 11:30 AM - 1:00 PM

11:30 AM - 1:00 PM - Lunch

12:00 noon - 1:00 PM - Tour of Caltech Gravity Wave Detector

SATURDAY 3 MARCH: 1:00 PM - 6:30 PM CHAIR - BOB WALD

1. Craig Hogan, Caltech, "Gravitational Wave Background." (30 min)
2. William Fairbank and Peter Michelson, Stanford, "Status of the Stanford Low-Temperature Gravity Wave Detector Program." (45 min)
3. Joseph Weber, University of Maryland and University of California at Irvine, "Status of Cryogenic Gravitational Radiation Detectors at the University of Maryland." (30 min)
4. John Moody, UCSB, "New Principle for the Detection of Gravitational Waves." (15 min) *Detection of Cosmological Axes*
5. Ho-Jung Paik, University of Maryland (on leave at Stanford), "Precision Gravity Experiments in Earth Orbit Using a Superconducting Gravity Gradiometer." (30 min)
6. Roger Penrose, Rice and Oxford, "Latest Results on Quasi-Local Mass." (30 min)
7. Jim Nester, Oregon State University, "Locally Positive Expressions for the Gravitational Hamiltonian." (30 min)
8. Abe Taub, University of California at Berkeley, "Positive Mass and Kaluza-Klein Theories." (30 min)
9. Mael A. Melvin, Santa Barbara, "Electrically Charged and Magnetic Cylindrical Mass Tubes in Three and Four Spacetime Dimensions." (30 min)
10. Kurt Just, University of Arizona, "Gravity and Asymptotic Freedom of Matter." (20 min)
11. POST MORTEM DISCUSSION - Was the meeting useful?  
Should it be held again next year?  
Should it be organized differently?



# UNIVERSITY OF OREGON

Jan. 22, 1985

Dear Colleague:

On Friday and Saturday, March 1-2, 1985, we plan to hold a conference on gravitational physics and general relativity. This conference, which we have named the Pacific Coast Gravity Meeting (PCGM) will take place on the campus of Cal Tech, in Pasadena, California. We invite your participation.

The format will be somewhat informal, of the nature of the old "Stevens Meetings" during the 1960's on the East Coast. In this spirit, we are not planning any highlighted addresses by specially-invited and paid-for speakers. Rather the talks will be given by those participants who wish to discuss their recent work. The amount of time allotted for each talk depends upon how many people want to give talks, but we would guess that around 30 minutes would be appropriate in most cases. Ample time will be left for general discussion during the two days of the meeting. There will also be time allotted for tours of the 40 meter laser interferometry gravitational radiation detector at Cal Tech. And on Friday evening, the participants are invited to Kip Thorne's home for drinks and informal discussion.

Although we wish to keep the meeting spontaneous and informal, to avoid chaos we ask that those who want to speak contact Jim Isenberg by Feb. 19th. A tentative schedule will be set up, based upon those we hear from by then. Note that we will probably schedule most of the experimental talks (as well as the tour) for Saturday.

Whether or not you wish to speak, if you plan to come, you should contact Pat Lyon by Feb. 22nd. Addresses and phone numbers are listed below.

Since we have no grant money supporting the PCGM, we can't give any money out to participants. As a slight compensation, there is no registration fee.

Enclosed is information regarding hotels. Please note the closing dates (Feb. 14) for the reserved rooms at the Imperial 400 and the Hilton. Also enclosed are a map of the Cal Tech campus, a map of the Pasadena area, and some information regarding limo service from LAX to Pasadena. Note that if you plan to rent a car, the Burbank airport is more convenient (But there is no limo service from there). There is (limited) parking space available on campus.

The first session of the conference will begin at 9:00 a.m., Friday, in room 24 of Beckman Lab (not Bechman Auditorium); see map. The last session will be over by 6:00 p.m. on Saturday.

The PCGM is an open meeting. Please invite any colleagues or students who might be interested. If you have any questions, please contact either of us.

Sincerely,



Jim Isenberg

Kip Thorne

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