



25th Pacific Coast Gravity Meeting

University of Oregon Eugene, Oregon 27-28 March 2009

PCGM25 PROGRAM

Each speaker will be alloted a maximum of 12 minutes for setup + the talk itself + questions and answers. Plan to limit your talk to no more than 10 minutes to allow time for setup and a question or two.

Speakers using computer generated talks, please have any files you need for your talk uploaded to the common presentation computer in advance. Send your file (or a link to your file) to rayfrey{at}uoregon{dot}edu or have it available before your session on a thumb drive. Blackboards, chalk, and overhead transparancy projectors are also available.

Friday, March 27, 2009

Session I (Chair: Tevian Dray)

| Name | Organization | Talk | Begin | End | Student |
|-----------------------|----------------------------|---|-------|-------|---------|
| | | Breakfast and Registration | 8:00 | 8:55 | |
| Jim Isenberg | University of Oregon | Welcome and Announcements | 8:55 | 9:00 | |
| Detournay Stephane | UC Santa Barbara | Three-dimensional gravities and black hole entropy | 9:00 | 9:12 | |
| Sophie de Buyl | UC Santa Barbara | Asymptotic infinite dimensional symmetry of gravity duals for non-relativistic CFTs | 9:12 | 9:24 | |
| Tomas Andrade | UC Santa Barbara | Stability Analysis of Topologically Massive Gravity in three dimensions | 9:24 | 9:36 | • |
| Derek Wise | UC Davis | Topologically Massive AdS Gravity | 9:36 | 9:48 | |
| Colin Cunliff | UC Davis | What happens in 3D gravity at the chiral point? | 9:48 | 10:00 | • |
| Usama al- Binni | University of Tennessee | Particle emission from a black hole on a tense codimension-2 brane | 10:00 | 10:12 | • |

| Matthew West | Syracuse University | eLIGO Photon Pressure Calibration | 10:12 | 10:24 | • |
|-----------------|------------------------|-----------------------------------|-------|-------|---|
| | | Coffee Break | 10:24 | 11:00 | |

Session II (Chair: Kip Thorne)

| Name | Organization | Talk | Begin | End | Student |
|----------------------|-----------------------------|--|-------|-------|---------|
| Harald Pfeiffer | Caltech | Comparing post-Newtonian binary black hole waveforms to numerical relativity simulations | 11:00 | 11:12 | |
| Tony Chu | Caltech | Simulations of Spinning (Non-Precessing) Binary Black Holes with SpEC | 11:12 | 11:24 | • |
| Lee Lindblom | Caltech | Improved Gauge Drivers for the Generalized Harmonic Einstein Equations | 11:24 | 11:36 | |
| Bela Szilagyi | Caltech | Numerical Simulations of Binary Black Hole Mergers | 11:36 | 11:48 | |
| Jim Bardeen | University of Washington | Trumpet Boundary Conditions for CMC Black Hole IVPs | 11:48 | 12:00 | |
| Luisa T. Buchman | Caltech | Black hole initial data to future null infinity | 12:00 | 12:12 | |
| Charles Torre | Utah State University | Algebraic Computing Tools for Gravitational Physics | 12:12 | 12:24 | |
| Sydney Chamberlin | Utah State University | Algebraic Computing Tools in Gravitational Physics | 12:24 | 12:36 | • |
| | | Lunch | 12:36 | 2:00 | |

Session III (Chair: Richard Price)

| Name | Organization | Talk | Begin | End | Student |
|------------------------|----------------------------|--|-------|------|---------|
| Jim Isenberg | University of Oregon | Initial Data for the Relativistic Gravitational N Body Problem | 2:00 | 2:12 | |
| Xianghui Luo | University of Oregon | Symmetries of Spacetimes with a Compact Cauchy Horizon | 2:12 | 2:24 | • |
| Michael Holst | UC San Diego | Some techniques for solving the Einstein constraint equations | 2:24 | 2:36 | |
| Gantumur Tsogtgerel | UC San Diego | Solutions of the Einstein constraint equations on asymptotically Euclidean manifolds | 2:36 | 2:48 | |
| Jeffrey S Hazboun | Oregon State University | Effect of negative energy shells on Schwarzschild spacetime | 2:48 | 3:00 | • |
| Sam Cook | Oregon State University | Symmetry Tensors of the Godel Universe | 3:00 | 3:12 | • |
| Rajesh Kommu | UC Davis | Causal Dynamical Triangulations in 2+1 Dimensions | 3:12 | 3:24 | • |
| | | Coffee Break | 3:24 | 4:00 | |

Session IV (Chair: Steve Carlip)

| Name | Organization | Talk | Begin | End | Student |
|------------------|-------------------------|--|-------|------|---------|
| Richard Price | UT Brownsville | Strong field effects on pulsar timing | 4:00 | 4:12 | |
| David Saroff | UC Berkeley | Orbits around Schwarzschild and Kerr black holes, a taxonomy | 4:12 | 4:24 | • |
| David Reeb | University of Oregon | Testability of black hole information and quantum- mechanical decoherence | 4:24 | 4:36 | • |
| Akira Villar | Caltech | Low Thermal Noise Coatings | 4:48 | 5:00 | • |
| | | Break | 5:00 | 6:00 | |

Session V (Chair: Jim Isenberg) 25th Anniversary Celebration

| Name | Organization | Talk | Begin | End | Student |
|------------------|---------------------|--|-------|------|---------|
| James Hartle | UC Santa Barbara | The Universe of General Relativity | 6:00 | 7:00 | |
| | | Dinner | 7:00 | 8:00 | |
| Richard Price | UT Brownsville | Reflections on a mirror moving at the speed of light | 8:00 | 8:30 | |

Saturday, March 28, 2009

Session VI (Chair: Lee Lindblom)

| Name | Organization | Talk | Begin | End | Student |
|---------------------|---------------------|--|-------|-------|---------|
| | | Breakfast and Registration | 8:00 | 9:00 | |
| Gary Horowitz | UC Santa Barbara | Using gravity to describe superconductivity | 9:00 | 9:12 | |
| Matthew Roberts | UC Santa Barbara | Hairy Black Holes and Holographic Superconductors | 9:12 | 9:24 | • |
| Aaron Amsel | UC Santa Barbara | Supergravity at the boundary of AdS supergravity | 9:24 | 9:36 | • |
| Geoffrey Compere | UC Santa Barbara | Central charges in the Kerr/CFT correspondence | 9:36 | 9:48 | |
| Ian Morrison | UC Santa Barbara | Group averaging for de Sitter free fields | 9:48 | 10:00 | • |
| Steven Carlip | UC Davis | The small scale structure of spacetime | 10:00 | 10:12 | |
| Marcus Afshar | UC Davis | Quasilocal Energy in FRW Cosmology | 10:12 | 10:24 | • |
| Chun-Yen Lin | UC Davis | Emergence of GR from LQG | 10:24 | 10:36 | • |
| | | Coffee Break | 10:36 | 11:00 | |

Session VII (Chair: Gary Horowitz)

| Name | Organization | Talk | Begin | End | Student |
|------------------------------------|--------------|---|-------|-------|---------|
| Jeandrew Brink | Caltech | Whetting the appetite for understanding strong field Binary Collisions | 11:00 | 11:12 | |
| Mark Scheel (for Kip Thorne) | Caltech | Flat-Spacetime Field Theory and Momentum Flow in Black-Hole Binaries | 11:12 | 11:24 | |
| Jeff Kaplan | Caltech | Post-Newtonian Approximation in a Maxwell- Like Form for Use in Interpreting Binary- Black-Hole Simulations | 11:24 | 11:36 | • |
| David Nichols | Caltech | Momentum Flow in Black-Hole Binaries: Post- Newtonian Approximation | 11:36 | 11:48 | • |
| Mark Scheel | Caltech | Momentum flow in binary black hole collisions: numerical results | 11:48 | 12:00 | |
| Keith D. Matthews | Caltech | Harmonic Initial Data for Post-Newtonian Comparison | 12:00 | 12:12 | • |
| Tanja Hinderer | Caltech | Transition from inspiral to plunge: Progress on an improved treatment | 12:12 | 12:24 | |
| | | Lunch | 12:24 | 1:48 | |

Session VIII (Chair: Ray Frey)

| | Name | Organization | Talk | Begin | End | Student |
|---|---------|--------------|--|-------|------|---------|
| ı | David | | | | | |
| ١ | Yeaton- | Caltech | From IR to Green: Measuring Doubling Noise | 2:00 | 2:12 | • |

| Massey | | | | | |
|---------------------|-----------------------------|--|------|------|---|
| Nicolas Smith | MIT | Enhanced LIGO: Output Mode Cleaner and DC Interferormeter Locking | 2:12 | 2:24 | • |
| Emelie Harstad | University of Oregon | An expanded search for GW bursts in association with GRBs | 2:24 | 2:36 | • |
| Tyson Littenberg | Montana State University | A Bayesian Approach to the Detection Problem in Gravitational Wave Astronomy | 2:36 | 2:48 | • |
| Joey Key | Montana State University | Characterizing the Gravitational Wave Signature from Cosmic String Cusps | 2:48 | 3:00 | • |
| Matthew Adams | Montana State University | Discriminating between a Stochastic Gravitational Wave Background and Instrument Noise | 3:00 | 3:12 | • |
| Joseph Plowman | Montana State University | Constraining the Black Hole Mass Spectrum with Gravitational Wave Observations | 3:12 | 3:24 | • |
| Michael Cohen | Caltech | Mock Lisa Data Challenge 3 - Finding Cosmic Strings with Markov Chain Monte Carlo Methods | 3:24 | 3:36 | • |
| | | Coffee Break | 3:36 | 4:06 | |

Session IX (Chair: Charles Torre)

| Name | Organization | Talk | Begin | End | Student |
|------------------|-----------------------------------|---|-------|------|---------|
| | | GGR Student Talk Award | 4:06 | 4:12 | |
| Yasushi Mino | Caltech | Thermal Noise of LIGO mirrors | 4:12 | 4:24 | |
| Greg Mendell | LIGO Hanford Observatory | The Search For Continous Gravitational Waves | 4:24 | 4:36 | |
| Isabel Leonor | University of Oregon | Search for a gravitational-wave counterpart to GRBs using the LIGO and Virgo detectors | 4:36 | 4:48 | |
| George Soli | Integrated Detector Systems | A null experiment shows superluminal group velocity is not sensitive to Earth's absolute motion | 4:48 | 5:00 | |

Back to the PCGM25 home page.

