

PCGM 31 Scientific Program (Oregon, March 13-14, 2015)

Friday, March 13, 2015

Session I (Chair: Jim Isenberg)

Name	Organization	Talk	Begin	End	Student
		Registration (and emergency coffee for those in need)	8:15	8:50	
Jim Isenberg	University of Oregon	Welcome and Announcements	8:50	9:00	
Kiwamu Izumi	LIGO Hanford Observatory	Current status of advanced LIGO	9:00	9:20	
Dipongkar Talukder	University of Oregon	Searches for gravitational waves associated with gamma-ray bursts	9:20	9:40	
Rui Xu	Indiana University, Bloomington	Corrections to Nonrelativistic Gravity from Lorentz Violation	9:40	10:00	★
		Coffee/Snack Break (30 minutes)	10:00	10:30	

Session II (Chair: Steven Carlip)

Name	Organization	Talk	Begin	End	Student
Casey Handmer	California Institute of Technology	Spectral Cauchy Characteristic Extraction - Gauge free news in SpEC	10:30	10:50	★
Jonathan Blackman	California Institute of Technology	Surrogate models of gravitational waveforms from numerical relativity simulations of binary black holes	10:50	11:10	★
Maria Okounkova	California Institute of Technology	Numerical Tests of the Cosmic Censorship Conjecture via Event-Horizon Finding	11:10	11:30	★
Zachary Mark	California Institute of Technology	Quasinormal modes of weakly charged Kerr-Newman spacetimes	11:30	11:50	★
		Lunch (1 hour, 50 min)	11:50	1:40	

Session III (Chair: Beverly Berger)

Name	Organization	Talk	Begin	End	Student
Jonas Mureika	Loyola Marymount University	Black Hole Thermodynamics in a Generalized Uncertainty Principle Spacetime	1:40	2:00	
Matthew Giesler	California Institute of Technology	Simulations of nearly extremal binary black holes	2:00	2:20	★
Geoffrey Lovelace	California State University, Fullerton	Nearly extremal apparent horizons in simulations of merging black holes	2:20	2:40	
Spencer Chang	University of Oregon	CMB signals of pre-inflationary bubble collisions	2:40	3:00	
		Coffee/Snack Break (20 minutes)	3:00	3:20	

Session IV (Chair: Ray Frey)

Name	Organization	Talk	Begin	End	Student
Adam Layne	University of Oregon	Instability of certain T^2 -symmetric cosmological solutions with magnetic field	3:20	3:40	★
James Dilts	University of Oregon	The Conformal Constraint Equations on Asymptotically Euclidean Manifolds	3:40	4:00	★
Ryan Quitzow-James	University Of Oregon	Search Strategy for Gravitational Waves Associated with Magnetar Bursts during LIGO's Sixth Science Run	4:00	4:20	★
Sudarshan Karki	University of Oregon	Absolute calibration of second-generation gravitational wave detectors using photon radiation pressure	4:20	4:40	★
Kevin Croker	University of Hawai'i at Manoa	ngravs: Distinct gravitational interactions in GADGET-2	4:40	5:00	★

Special Lecture (Chair: Jim Isenberg)

		Wine and Cheese Reception	5:15	6:15	
Kip Thorne	California Institute of Technology	A Physicist in Hollywood: Interstellar in the Centennial Year of Einstein's General Relativity	7:00	8:00	

Saturday, March 14, 2015

Session V (Chair: Paul Allen)

Name	Organization	Talk	Begin	End	Student
		Registration (and emergency coffee for those in need)	9:00	9:10	
Robert Littlejohn	University of California Berkeley	Symplectic Aspects of the Schla"fli Identity	9:10	9:30	
Eugene Kur	University of California, Berkeley	Noether Currents, Boundary Terms, and Multisymplectic Geometry	9:30	9:50	★
Michael Ross	Humboldt State University	Experimental Progress on Test of Gravity at 20 Microns with a Parallel-Plate Torsion Pendulum	9:50	10:10	★
		Coffee/Snack Break (20 minutes)	10:10	10:30	

Session VI (Chair: Geoffrey Lovelace)

Name	Organization	Talk	Begin	End	Student
Tevian Dray	Oregon State University	The Geometry of Relativity	10:30	10:50	
Gabriel Herczeg	University of California, Davis	CPT horizons and chronology protection in shape dynamics	10:50	11:10	★
Joseph Mitchell	University of California, Davis	Where are the BTZ Black Hole Degrees of Freedom?	11:10	11:30	★
Charlie Hagedorn	University of Washington / Center for Experimental Nuclear	Sub-millimeter Parallel-Plate Test of the Gravitational Inverse-Square Law	11:30	11:50	★
Meg Millhouse	Montana State University	Detecting and characterizing binary black hole mergers without waveform templates	11:50	12:10	★
Nader Inan	UC Merced	The interaction of gravitational waves with superconductors	12:10	12:30	★
		Lunch (1 hour, 40 min)	12:30	2:10	

Session VII (Chair: Tevian Dray)

Name	Organization	Talk	Begin	End	Student
		GGR Student Talk Award (Winner: TBA)	2:10	2:20	
Steven Carlip	University of California, Davis	Four-dimensional entropy from three-dimensional gravity	2:20	2:40	
Bill Engels	California Institute of Technology	Core-collapse Gravitational Wave Prediction with Multivariate Regression	2:40	3:00	
Daniel Hemberger	California Institute of Technology	SXS Catalog of Gravitational Waveforms	3:00	3:20	
Beverly Berger	NSF (retired)	Comments on expanding T2 symmetric cosmological spacetimes	3:20	3:40	
Paul Allen	Lewis & Clark College	The shear-free condition and the regularity of hyperboloidal initial data at future null infinity	3:40	4:00	
Naomi Gendler	Reed College	A Parameter Estimation Pipeline for aLIGO	4:00	4:20	