

PCGM 30 Scientific Program (UCSD, March 28-29, 2014)

Friday, March 28, 2014

Session I (Chair: Michael Holst, UC San Diego)

Name	Organization	Talk	Begin	End	Student
		Registration (and emergency coffee for those in need)	8:15	9:00	
Michael Holst	UC San Diego	Welcome and Announcements	9:00	9:15	
Jim Isenberg	University of Oregon	On Renormalization Group Flow	9:15	9:30	
Ali Behzadan	UC San Diego	The Einstein Constraint Equations	9:30	9:45	★
Jon Kaufman (Brian Keating)	UC San Diego	The BICEP2 experiment and first results	9:45	10:15	★
		Coffee/Snack Break in 2402A AP&M (30 minutes)	10:15	10:45	

Session II (Chair: Melvin Leok, UC San Diego)

Name	Organization	Talk	Begin	End	Student
Aaron Zimmerman	Canadian Institute for Theoretical Astrophysics	Eikonal Green Function of the Kerr Spacetime	10:45	11:00	
Netta Engelhardt	UC Santa Barbara	Extremal Surfaces and Singularities	11:00	11:15	★
Gavin Hartnett	UC Santa Barbara	Instabilities of Rotating Black Holes and Quasinormal Modes in the Large D Limit	11:15	11:30	★
William Kelly	UC Santa Barbara	Linearized Instabilities in the Gravitational Dirichlet Problem	11:30	11:45	★
Amol Patwardhan	UC San Diego	Gravitational radiation from late-time vacuum phase transitions	11:45	12:00	★
Evan Grohs	UC San Diego	Photon Diffusion in the early Universe	12:00	12:15	★
		Lunch off-campus somewhere (2 hours)	12:15	2:15	

Session III (Chair: Manuel Tiglio, University of Maryland & Caltech)

Name	Organization	Talk	Begin	End	Student
Huan Yang	Perimeter Institute for Theoretical Physics	Turbulent black holes	2:15	2:30	
Roland Haas	Caltech	Binary neutron star simulations with SpEC	2:30	2:45	
Evan Foley	CSU Fullerton	Neutron star-black hole simulations with very fast black hole spins	2:45	3:00	★
Sherwood Richers	Caltech	Jet Instability in Magnetorotational Core-Collapse Supernovae	3:00	3:15	★
		Coffee/Snack Break in 2402A AP&M (30 minutes)	3:30	4:00	

Session IV (Chair: Lee Lindblom, Caltech)

Name	Organization	Talk	Begin	End	Student
Casey Handmer	Caltech	Spectral Characteristic Evolution: A new algorithm for gravitational wave propagation	4:00	4:15	
Jonathan Blackman	Caltech	A sparse representation of gravitational waves from precessing compact binaries	4:15	4:30	★
Geoffrey Lovelace	CSU Fullerton	A catalog of binary black-hole simulations for gravitational-wave astronomy	4:30	4:45	
Kevin Barkett	Caltech	Gravitational Waveforms in the Early Inspiral of Black Hole-Neutron Star Systems	4:45	5:00	★
David Radice	Caltech	Beyond 2nd order convergence in numerical relativity simulations of binary neutron stars	5:00	5:15	
Reza Katebi	CSU Fullerton	Simulations of merging, spinning black holes: How fast do the resulting holes initially spin?	5:15	5:30	

Saturday, March 29, 2014

Session V (Chair: Jim Isenberg, Oregon)

Name	Organization	Talk	Begin	End	Student
		Registration (and emergency coffee for those in need)	8:15	9:00	
David Rideout	UC San Diego	Monte Carlo Simulations of Causal Set Quantum Gravity	9:00	9:15	
Sebastian Fischetti	UC Santa Barbara	Entanglement in Extremal Reissner-Nordstrom AdS	9:15	9:30	★
Kevin Kuns	UC Santa Barbara	Quantum Quench in a CFT with Large Central Charge	9:30	9:45	★
Yinbo Shi	UC Santa Barbara	Effective Field Theory Parameterization of Nonviolent Nonlocality	9:45	10:00	★
Eric Mefford	UC Santa Barbara	Superfluid-Insulator Transition from Holography	10:00	10:15	★
Maximiliano Isi	Loyola Marymount University	Testing GR with Continuous Gravitational Waves	10:15	10:30	★
		Coffee/Snack Break in 2402A AP&M (30 minutes)	10:30	11:00	

Session VI (Chair: Geoffrey Lovelace, CSU Fullerton)

Name	Organization	Talk	Begin	End	Student
Rana Adhikari	Caltech	LIGO Overview	11:00	11:15	
Leo Singer	LIGO Lab / Caltech	The First Two Years of Electromagnetic Follow-Up with Advanced LIGO and Virgo	11:15	11:30	★
Tjonnie Li	Caltech	Testing the strong-field dynamics of general relativity with the Advanced LIGO-Virgo network	11:30	11:45	
Daniel Hemberger	Caltech	Detecting Near-Extremal Binary Black Holes	11:45	12:00	
Stephen Privitera	Caltech	Searching for Gravitational Waves from the Coalescence of Two Spinning Solar Mass Black Holes	12:00	12:15	★
		Lunch off-campus somewhere (2 hours)	12:15	2:15	

Session VII (Chair: Mark Scheel, Caltech)

Name	Organization	Talk	Begin	End	Student
Vladimir Dergachev	LIGO Lab / Caltech	Noise at low frequencies	2:15	2:30	
Zach Korth	Caltech	Advanced LIGO: In the Bag	2:30	2:45	★
Evan Hall	Caltech	Cryogenic Silicon Reference Cavities for Precision Measurement	2:45	3:00	★
Brett Shapiro	Stanford University	Advanced LIGO Seismic Isolation and Control	3:00	3:15	
Jonah Kanner	Caltech	Finding explosive transients with gravitational waves	3:15	3:30	
John Moody	UC San Diego	Geodesic Finite Elements on Symmetric Spaces	3:30	3:45	★
		Coffee/Snack Break in 2402A AP&M (30 minutes)	3:45	4:15	

Session VIII (Chair: Alan Weinstein, Caltech)

Name	Organization	Talk	Begin	End	Student
		GGR Student Talk Award (Winner: Netta Engelhardt)	4:15	4:20	
Lee Lindblom	Caltech	Solving Einstein's Equation Numerically on Manifolds with Arbitrary Spatial Topologies	4:20	4:35	
Manuel Tiglio	University of Maryland & Caltech	Fast parameter estimation through compressed likelihood evaluations	4:35	4:50	
Bela Szilagy	Caltech	Reaching from NumRel-land into PN territory	4:50	5:05	
Chad Galley	Caltech	Surrogate models for numerical relativity waveforms	5:05	5:20	
Mark Scheel	Caltech	Simulations of high-spin black-hole binaries	5:20	5:35	