Scientific Program

The meeting takes place on Friday and Saturday, March 26 and 27, 2021. Registered participants have been sent the zoom meeting information by email.

The scientific program is displayed below in an interactive format. Alternatively, here is a hard copy. Talks are 12 minutes total, including questions. All times are given in the ***pacific time zone***.

1. Opening remarks — Friday 9 AM PDT

Chair: Sam Gralla

	speaker	title (click for abstract)	time
1	James Allen Isenberg	History of PCGM	9:00

2. Tests of Gravity — Friday 9:15 AM PDT

Chair: Katerina Chatziioannou

	speaker	title (click for abstract)	time
1	Lance Blagg	The Extended Uncertainty Principle Kerr Black Hole	9:15
2	Rhondale Tso*	Testing Relativity with Gravitational Waves: The Next Generation Detectors	9:27
3	Sam Gralla	Photon Ring Tests of Gravity	9:39
4	Jose M. Ezquiaga	Gravitational wave lensing meets tests of general relativity	9:51
5	Nima Laal*	Pulsar Timing and Alternative Theories of Gravity	10:03
6	Zonghao Li*	Diffeomorphism violation and local Lorentz violation in gravitational effective field theories	10:15
7	Alyssa Johnson	Progress on Novel Tests of Gravity at the Submillimeter Scale	10:27

3. Numerical Relativity and Matter — Friday 11:15 AM PDT

Chair: Jocelyn Read

	speaker	title (click for abstract)	time
1	Jane Bright*	Minidisk Dynamics in Accreting, Spinning Black Hole Binaries: Simulations in Full General Relativity	11:15
2	Pedro Espino*	The Fate of Twin Stars on the Unstable Branch: Implications for the Formation of Twin Stars	11:27
3	Nils Deppe	Robust adaptive-order methods for relativistic magnetohydrodynamics	11:39
4	Erik Wessel*	NR Simulations of PPI-Unstable BH-Disk Systems: BH Spin and Gravitational Wave Detectability	11:51
5	Franklin Felber	Dipole gravitational waves from compact binaries	12:03

4. Classical Relativity — Friday 1 PM PDT

Chair: Charles Torre

	speaker	title (click for abstract)	time
1	Alexander Y. Yosifov*	A New Look at the C^{0}-formulation of the Strong Cosmic Censorship Conjecture	1:00
2	Nader Inan	Maxwellian Mirages in GR	1:12
3	Arun Ravishankar*	Horizon Instability of the Extremal BTZ Black Hole	1:24
4	Kartik Prabhu	Asymptotic quantum fields at spatial infinity	1:36
5	James Allen Isenberg	Stability of AVTD Behavior about Kasner Space Times in Polarized T^2-symmetric Vacuum Solutions	1:48

5. Quantum Issues — Friday 2:30 PM PDT

Chair: Kartik Prabhu

	speaker	title (click for abstract)	time
1	Lintao Tan*	Quantum Gravitational Corrections to Gravity during Inflation	2:30
2	John Botke	Accelerating scaling and the origin of all cosmic structures, both large and small	2:42
3	Philip Tee	Dynamics in Emergent Spacetime Geometries	2:54
4	Abhijit Chakraborty*	Conformal aspects of near-horizon acceleration radiation of an atom freely falling into a black hole	3:06
5	Sanjib Katuwal*	Inflaton Effective potential from Photons for General ϵ	3:18
6	Michael Bishop	Modified commutators are not sufficient to determine a quantum gravity minimal length scale	3:30
7	Diandian Wang*	4D physics from 2D: Descendants in celestial CFT and emergent multi-collinear factorization	3:42

6. Holography — Saturday 11 AM PDT

Chair: Gary Horowitz

	speaker	title (click for abstract)	time
1	Douglas Singleton	A Non-Abelian Firewall Solution	11:00
2	Aasmund Folkestad*	Holography Abhors Visible Trapped Surfaces	11:12
3	Jie-qiang Wu	Peierls bracket and gravitational dressing in Jackiw-Teitelboim gravity	11:24
4	Henry Maxfield	Gravitating spinning strings in AdS3	11:36
5	David Grabovsky*	The Tortoise and the Hare: A Causality Puzzle in AdS/CFT	11:48
6	Sergio Hernandez-Cuenca*	Boundary Causality Violating Metrics in Holography	12:00

7. Astrophysics — Saturday 1 PM PDT

Chair: Vasileios Paschalidis

	speaker	title (click for abstract)	time
1	Zoheyr Doctor	The Population of Remnant Black Holes From Stellar Mass Black Hole Mergers	1:00
2	Yangyang Cai*	Consistent Blandford-Znajek expansion	1:12
3	Will Lockhart*	Re-analyzing Data from the Event Horizon Telescope: An Alternative Liklihood Function for Geometric Model Fitting	1:24

	speaker	title (click for abstract)	time
4	Daniel Palumbo*	Discriminating Accretion States via Rotational Symmetry in Simulated Polarimetric Images of M87	1:36
5	Nathan June	Roadblocks to Detecting Continuous Gravitational Waves	1:48

8. Numerical Relativity and Gravitational Waves — Saturday 2:30 PM PDT

Chair: Sam Gralla

	speaker	title (click for abstract)	time
1	Gabriele Bozzola*	Advancements in general-relativistic simulations of charged black holes	2:30
2	Xiang Li*	Angular emission patterns of remnant black-holes	2:42
3	Keefe Mitman*	Gravitational Memory in Numerical Relativity: Computing Memory Effects and Correcting Existing Waveforms	2:54
4	Alireza Rashti*	Elliptica: a new code for construction of initial data	3:06
5	Vasileios Paschalidis	Black hole-neutron star coalescence: Effects of the neutron star spin on jet launching and dynamical ejecta mass	3:18

9. Award Ceremony — Saturday 3:30 PM PDT

Chair: Sam Gralla

	speaker	title (click for abstract)	time
1	Sam Gralla	Presentation of the DGRAV award for the best student talk	3:30

*speaker is graduate student