

41st Jim Isenberg Pacific Coast Gravity Meeting

Cal State Fullerton, Steven G. Mihaylo Hall room 1406

| Welcome | | Friday, April 4 |
|---------|-------------------|--------------------------------|
| 8:20 AM | | Coffee & continental breakfast |
| 8:50 AM | Geoffrey Lovelace | Welcome & announcements |

| Session I | | Friday, April 4 |
|---------------------|-------------------|---|
| 9:00 AM | Vladimir Strokov | LISA double white dwarf binaries as Galactic accelerometers |
| 9:15 AM | Tyler Smith* | Isolated But Not Alone: Binary Black Hole Mergers |
| 9:30 AM | Isabella Pretto* | Automated multimode fitting of binary black hole ringdowns |
| 9:45 AM | Brian Seymour* | Inspiral tests of general relativity and waveform geometry |
| 10:00 AM | Tousif Islam | Data-driven extraction, phenomenology and modeling of eccentric harmonics in binary black hole merger waveforms |
| 10:15 AM | Jarosław Kopiński | Conformal geometry of spacetimes with prescribed asymptotic behavior |
| 10:30 AM – 11:00 AM | | Coffee break |

| Session II | | Friday, April 4 |
|--------------------|-------------------|--|
| 11:00 AM | Marceline Bonilla | Rescaled ppE Parameters for Parameter Estimation Across PN Order |
| 11:15 AM | Kai-Isaak Ellers* | How to measure gravitational frame-dragging on Earth with a superfluid interferometer |
| 11:30 AM | Ryan Johnson* | Correcting Compact Binary Inspiral Gravitational Waveform Uncertainty in Bayesian Inference Parameter Estimation |
| 11:45 AM | Daniel Hooker* | Testing Generalized Uncertainty Principles via Coherent States |
| 12:00 PM | Daniel Grass* | Photon counting interferometry to detect geotropic space-time fluctuations with GQuEST |
| 12:15 PM | Ajit Kumar Mehta | Constraints on high-mass black hole populations from a search incorporating higher harmonics |
| 12:30 PM – 2:00 PM | | Lunch |

41st Jim Isenberg Pacific Coast Gravity Meeting

Cal State Fullerton, Steven G. Mihaylo Hall room 1406

| Session III | | Friday, April 4 |
|-------------------|------------------|---|
| 2:00 PM | Quentin Bailey | Aspects of spacetime-symmetry breaking and gravity |
| 2:15 PM | Zi-Yue Wang* | The D-series minimal string theory |
| 2:30 PM | David Grabovsky* | Spin-Refined Partition Functions and CRT Black Holes |
| 2:45 PM | Colin Weller* | Classifying Isospectrality Beyond General Relativity |
| 3:00 PM | Sang-Eon Bak* | Modular Hamiltonian Fluctuations in Cosmology |
| 3:15 PM | Krishan Saraswat | Constraints from Entanglement Wedge Nesting for Holography at a Finite Cutoff |
| 3:30 PM – 4:00 PM | | Coffee break |

| Session IV | | Friday, April 4 |
|------------|---------------------|--|
| 4:00 PM | Himanshu Chaudhary* | How accurate is SpEC? |
| 4:15 PM | Taylor Knapp* | A detailed look on the accuracy of BBH simulations with SpEC |
| 4:30 PM | Dongze Sun* | Parameter matching between Post-Newtonian and Numerical Relativity for binary black hole systems |
| 4:45 PM | Guido Da Re* | Modeling the BMS transformation induced by a binary black hole merger |

41st Jim Isenberg Pacific Coast Gravity Meeting

Cal State Fullerton, Steven G. Mihaylo Hall room 1406

| Welcome | | Saturday, April 5 |
|---------|--------------------------------|-------------------|
| 8:20 AM | Coffee & continental breakfast | |

| Session V | | Saturday, April 5 |
|---------------------|-------------------|--|
| 9:00 AM | Emily Wuchner | Simulating the Recovery of Tidal Parameters From Neutron-Star Mergers With Ground-Based Gravitational-Wave Detectors |
| 9:15 AM | James Kwon* | Impact of nonlinear hydrodynamics on g-modes in neutron stars in coalescing binaries |
| 9:30 AM | Philip Sarkisian* | Electrodynamics in an Expanding Universe |
| 9:45 AM | Isaac Legred* | Nuclear physics and extreme gravity |
| 10:00 AM | Andrew Laeuger* | Ringdown Stability and Localized Matter Distributions |
| 10:15 AM | Yoonsoo Kim* | Monster shocks and black hole pulsars from neutron star--black hole mergers |
| 10:30 AM – 11:00 AM | | Coffee break |

| Session VI | | Saturday, April 5 |
|--------------------|-----------------------|---|
| 11:00 AM | Guanyu Lu* | Arbitrarily Negative ADM Mass for Kaluza-Klein Bubbles |
| 11:15 AM | Henry Leung* | New bulk cone singularities in Vaidya-like spacetimes from large c conformal blocks |
| 11:30 AM | Sawyer Star* | Solutions to Modified Uniform Accelerating Motion and Their Rindler Coordinates |
| 11:45 AM | Nauman Ibrahim* | On the road to estimating the Weyl curvature in a causal set |
| 12:00 PM | Dario Walter-Cardona* | Lorentz Symmetry Breaking as a nonlinear ODE |
| 12:15 PM | Joonhwi Kim* | Newman-Janis Algorithm from Taub-NUT Instantons |
| 12:30 PM – 2:00 PM | | Lunch |

41st Jim Isenberg Pacific Coast Gravity Meeting

Cal State Fullerton, Steven G. Mihaylo Hall room 1406

| Session VII | | Saturday, April 5 |
|-------------------|-------------------|--|
| 2:00 PM | Kyle Nelli* | Simulating Binary Black Holes with SpECTRE |
| 2:15 PM | Alexandra Macedo* | Improvements to SpECTRE's Computational Domain for Binary Black Hole Simulations |
| 2:30 PM | Alex Carpenter* | Simulating Unequal Mass and Precessing Binary Black Holes with SpECTRE |
| 2:45 PM | Richard Cook | The Gravitational Analog of Maxwell's Equations: A Solution to the Vacuum-energy and Cosmological-constant Problems within Conventional General Relativity |
| 3:00 PM | Brian Tillotson | Does gravitation emerge from a neutrino-antineutrino plasma? |
| 3:15 PM | Gh. Saleh | A New Perspective on the Structure, Model, and Mechanism of Gravity |
| 3:30 PM – 4:00 PM | | Coffee break |

| Session VIII | | Saturday, April 5 |
|--------------|-------------------|--|
| 4:00 PM | David Lindsay | wCDM with $w < -1$ can solve the Hubble Tension, but destroys the universe |
| 4:15 PM | Don V Black | Mass Detection via Time Dilation |
| 4:30 PM | Frank Hafner | Can an added degree of freedom of motion relate to gravity |
| 4:45 PM | Geoffrey Lovelace | Announcement of the DGRAV student prize winner |