



Day 1: Monday, December 1

8:30-9:00	Welcome
Session 1	GW landscape in the next 10 years
9:00-9:30	Neil Cornish - The GW landscape and the future of the GW field in the next 10 years (25+5 min)
9:30-9:43	Derek Davis - GWTC-4.0: an inside look at this expanded catalog of transient gravitational-wave events (10+3 min)
9:43-9:56	Anjali Yelkar - Multi-messenger and multiband prospects for binary neutron stars (10+3 min)
9:56-10:09	Urja Shah - Prospects for Joint Multimessenger Detections in the Next Decade (10+3 min)
10:09-10:22	Tingting Liu - Multi-Messenger Astrophysics with NewAthena Across the Mass Scale (10+3 min)
10:22-10:30	8 mins reserved for transitions
10:30-11:00	BREAK
Session 2	LVK results from the 4th observing run
11:00-11:30	Daniel Williams - GWTC-4.0: Observations and Results (25+5 min)
11:30-12:00	Aditya Vijaykumar - Population insights from the latest catalog of merging compact binaries (25+5 min)
12:00-12:30	Tom Callister - TBD (25+5 min)
12:30-12:45	Lightning talks (part 1)
12:45-14:00	LUNCH
14:00-14:20	Lightning talks (part 2)
Session 3	Neutron stars and counterparts
14:20-14:33	Charlie Kilpatrick - The Multi-Messenger Treasure TROVE: A Tool for Rapid Object Vetting and Examination (10+3 min)
14:33-14:46	Xander Hall - AT2025ulz and S250818k: Early-Time Observations and DESI-Enabled Kilonova Search for a Sub Solar Mass Graviational Wave Binary Neutorn Star Candidate (10+3 min)

14:46-14:59	Victoria Niu - GW231109_235456: A Sub-threshold Binary Neutron Star Merger in the LIGO–Virgo–KAGRA O4a Observing Run? (10+3 min)
14:59-15:12	Alan Knee - Searches for gravitational waves from the 2024 Vela pulsar glitch (10+3 min)
15:12-15:20	8 mins reserved for transitions
15:20-15:30	QUICK BREAK
Session 4	Poster session and reception
15:30-16:30	Lightning talks (part 3 and 4)
16:30-18:00	Poster viewing and reception

Day 2: Tuesday, December 2

8:30-9:00	Exhibition Hall opens
Session 1	Stellar evolution and compact object populations
9:00-9:30	Sylvia Biscoveanu - TBD (25+5 min)
9:30-9:43	Simona Miller - The distribution of spin across the population of merging binary black holes: Results and validation (10+3 min)
9:43-9:56	Sergey Klimenko - All-sky search for short gravitational-wave bursts in the first part of the fourth LIGO-Virgo-KAGRA observing run (10+3 min)
9:56-10:09	Alexander Criswell - Gravitational-Wave Population Inference for the LISA Era and Beyond (10+3 min)
10:09-10:22	Kaitlyn Szekerczes - The Galactic Imposters: Electromagnetic Mayhem in the LISA Error Box (10+3 min)
10:22-10:30	8 mins reserved for transitions
10:30-11:00	BREAK
Session 2	Neutron stars
11:00-11:30	Ornella Piccinni - Latest Continuous-Wave Search Results from the LIGO-Virgo-KAGRA Collaboration in O4 (25+5 min)
11:30-11:43	Carolyn Raithel - Tidal deformability doppelgangers (10+3 min)
11:43-11:56	James Kwon - Resonance locking: Impact of nonlinear hydrodynamics on g-modes in coalescing neutron star binaries (10+3 min)
11:56-12:09	Eliot Finch - Unified nonparametric equation-of-state inference from the neutron-star crust to perturbative-QCD densities (10+3 min)

12:09-12:22	Jasper Martins - Novelties in and results of recent Einstein@Home All-sky Searches for Continuous Gravitational Waves (10+3 min)
12:22-12:30	8 mins reserved for transitions
12:30-14:00	LUNCH
Session 3	Multi-messenger astrophysics I
14:00-14:35	Igor Andreoni and Brian Metzger - TBD (30+5 min)
14:35-14:48	Karelle Siellez - Chasing the Ghost of GW170817: Strategies and Hope for Detecting the Next Kilonova Optical Counterpart (10+3 min)
14:48-15:01	Muhammed Choleyil - Mergers Fall Short: Non-merger Channels Required for Galactic Heavy Element Production (10+3 min)
15:01-15:14	Erin Vincent - Gravitational Wave Follow-up of Gamma-Ray Bursts During the First Part of the Fourth LIGO-Virgo-KAGRA Observing Run (10+3 min)
15:14-15:27	Jimmy DeLaunay - Searching for weak GRB counterparts to gravitational waves with Swift/BAT GUANO: O4 Status and Results
15:27-15:30	3 mins reserved for transitions
15:30-16:00	BREAK
Session 4	Panel discussion: New experiments
16:00-17:30	Panelists: Nancy Agarwal, Kelly Holley-Bockelmann, Karan Jani, Feryal Ozel, Nihan Pol, Peter Shawhan,

Day 3: Wednesday, December 3

8:30-9:00	Exhibition Hall opens
Session 1	Intermediate mass and massive black holes
9:00-9:24	Sophie Bini - GW231123: a binary black hole merger with total mass 190–265 Msun (20+4 min)
9:24-9:48	Caitlin Witt - TBD (20+4 min)
9:48-10:01	Krystal Ruiz-Rocha - Properties of 'Lite' Intermediate-Mass Black Hole Candidates in LIGO-Virgo's Third Observing Run (10+3 min)
10:01-10:14	Maria Charisi - Searching for supermassive black hole binaries (10+3 min)
10:14-10:27	Hanxi Wang - Black holes as telescopes: Discovering supermassive binaries through quasi-periodic lensed starlight (10+3 min)
10:27-10:30	3 mins reserved for transitions

10:30-11:00	BREAK
Session 2	Multi-messenger astrophysics II
11:00-11:30	Juan Calderon Bustillo - Folding gravitational-wave recoil and spin measurements to inform multi-messenger observations of black-hole mergers in AGNs (25+5 min)
11:30-11:43	Chi-Ho Chan - Radiative magnetohydrodynamics simulation of minidisks in massive black hole binaries (10+3 min)
11:43-11:56	Niana Mohammed - Stubborn broad emission lines: The supermassive binary hopefuls that came through and the ones that disappointed (10+3 min)
11:56-12:09	Chengcheng Xin - Identifying Compact Chirping SMBHBs in LSST using Bayesian Analysis (10+3 min)
12:09-12:22	Niccolò Veronesi - All-sky surveys: promises and challenges in the search for the hosts of SuperMassive Black Hole binaries (10+3 min)
12:22-12:30	8 mins reserved for transitions
12:30-14:00	LUNCH
Session 3	Tests of GR
14:00-14:30	Max Isi - TBD (25+5 min)
14:30-14:43	Nicole Khusid - Measuring overtones in a loud ringdown with LIGO-Virgo-KAGRA (10+3 min)
14:43-14:56	Lorenzo Pompili - Black Hole Spectroscopy and Tests of General Relativity with a Loud Binary Black Hole Signal (10+3 min)
14:56-15:09	Nicholas Loutrel - Probing Modified Gravitational Wave Dispersion with Eccentric Bursts (10+3 min)
15:09-15:22	Subhayu Bagchi - Numerical solutions for rotating Black Holes in dynamical Chern-Simons theory
15:22-15:30	8 mins reserved for transitions
15:30-16:00	BREAK
Session 4	Panel discussion: Multi-messenger astrophysics
16:00-17:30	Panelists: Iair Arcavi, Derek Davis, Michael Eracleous, Brian Metzger, Maria Alessandra Papa, Caitlin Witt
19:00-20:00	Public talk by Krista Lynne Smith - TBD
	Location: Howey Physics Building, Lecture Hall L1

Day 4: Thursday, December 4

8:30-9:00	Exhibition Hall opens
Session 1	Cosmology and the early universe
9:00-9:30	Danny Laghi - Latest constraints on the Hubble constant and modified gravitational-wave propagation with GWTC-4.0 (25+5 min)
9:30-9:43	Ignacio Magana Hernandez - Dark Siren Cosmology with the Dark Energy Spectroscopic Instrument (DESI) (10+3 min)
9:43-9:56	William Smith - Large-scale structure of the universe as the astrophysical probe for stellar-mass binary black hole mergers (10+3 min)
9:56-10:09	Krishnendu Naderi Varium - Probing the population of pop III remnants using gravitational wave observations (10+3 min)
10:09-10:22	Miguel Zumalacarregui - Wave-optics phenomena, lensed gravitational waves and GW231123 (10+3 min)
10:22-10:30	3 mins reserved for transitions
10:30-11:00	BREAK
Session 2	New techniques in GW data modeling and analysis
11:00-11:13	William Benoit - ml4gw: a new ecosystem for the use of AI in end-to-end GW searches (10+3 min)
11:13-11:26	Digvijay Wadekar - Best of both worlds: integrating principled matched-filtering searches with AI/ML tools (10+3 min)
11:26-11:39	Javier Roulet - labrador: an easy-to-train machine-learning tool for gravitational wave inference (10+3 min)
11:39-11:52	Sofia Alvarez-Lopez - Nowhere left to hide: revealing realistic gravitational-wave populations in high dimensions and high resolution with PixelPop (10+3 min)
11:52-12:05	Chayan Chatterjee - Advancing Intermediate-Mass Black Hole Discovery Through Novel Machine Learning Classification and Reconstruction (10+3 min)
12:05-12:18	Craig Pellegrino - The ACROSS Facility: Enabling Community-wide Follow-up of Multimessenger Sources (10+3 min)
12:18-12:31	Rachel Langgin - Gravitational waveform accuracy requirements for current and future ground-based detectors (10+3 min)
12:31-12:40	9 mins reserved for transitions
12:40-14:00	LUNCH
	Breakouts

14:00-15:30	Tutorial 1: William Benoit - ml4gw: a new ecosystem for the use of AI in end-to-end GW searches (90 min) Breakout room: Kirkwood
14:00-15:30	Tutorial 2: Collin Capano - PyCBC Inference: standard IMR analyses and black hole spectroscopy (90 min) Breakout room: Sweet Auburn
14:00-15:30	Tutorial 3: Yumeng Xu - PycWB: A Modular Framework for Current- and Next-Generation Gravitational-Wave Burst Searches (90 min) Breakout room: Old Fourth Ward
15:30-16:00	BREAK
16:00-17:30	Tutorial 1 continued: Deep Chatterjee - Application of likelihood-free inference in GW data analysis (90 min) Breakout room: Kirkwood
16:00-17:30	Tutorial 2 continued: Shichao Wu - Mock data generation and analysis of LISA and XG detectors with PyCBC (90 min) Breakout room: Sweet Auburn
16:00-17:30	Feel free to use this space for unstructured activities and collaboration Breakout room: Old Fourth Ward
	End of the workshop