

NEB-21

Monday 1 September 2025

Morning: Gravitational Waves (09:00 - 10:40)

-Conveners: THEOCHARIS APOSTOLATOS

| time | [id] title | presenter |
|-------|--|-------------------------|
| 09:00 | [84] Gravitational Waves: A Decade of Exploring the Universe | Dr SINTES, Alicia |
| 09:50 | [1] Spinning Black Holes in Binaries Observed with Gravitational Waves | CHATZIIOANNOU, Katerina |

Morning: Gravity (11:00 - 13:00)

-Conveners: Constantinos Skordis

| time | [id] title | presenter |
|-------|--|-------------------------|
| 11:00 | [72] Causality with Gravity | Prof. DE RHAM, Claudia |
| 11:50 | [13] Penrose inequality for integral energy conditions | KONTOU, Eleni-Alexandra |
| 12:25 | [83] Gravitational waves in quadratic gravity | ANTONIOU, Georgios |

Tuesday 2 September 2025

Morning: Cosmology - Amphitheater 1 (09:00 - 10:40)

-Conveners: Fabrizio Canfora

| time | [id] title | presenter |
|-------|--|-----------------------|
| 09:00 | [21] Extensions of General Relativity and cosmological dark matter | SKORDIS, Constantinos |
| 09:50 | [91] A f(R)esh look at the dynamics of modified gravity | Prof. DUNSBY, Peter |

Morning: Cosmology - Amphitheater 1 (11:00 - 12:50)

-Conveners: Alicia Sintes

| time | [id] title | presenter |
|-------|--|------------------------------|
| 11:00 | [89] Secondary Gravitational Waves as probes of the early Universe and Gravity | TZEREFOS, Charalampos |
| 11:35 | [85] Cosmological Reconstructions with Neural Networks: From Data to Theory | DIALEKTOPOULOS, Konstantinos |
| 12:10 | [22] Some Constraints on Some Alternative Theories of Gravity | ABEBE, Amare |
| 12:30 | [9] Vector induced gravitational waves sourced by primordial magnetic fields | Dr PAPANIKOLAOU, Theodoros |

Wednesday 3 September 2025

Morning: Gravitational Waves - Amphitheater 1 (09:00 - 10:40)

-Conveners: Vladimir Karas

| time | [id] title | presenter |
|-------|--|-----------------------------|
| 09:00 | [75] Self-force in hyperbolic scattering | Prof. BARACK, Leor |
| 09:50 | [96] From Algorithms to Astrophysics: Machine Learning in Gravitational Wave Astronomy | Prof. STERGIOULAS, Nikolaos |

Morning: Gravitational Waves and Machine Learning - Amphitheater 1 (11:00 - 12:50)

-Conveners: Leor Barack

| time | [id] title | presenter |
|-------|--|-----------------------------------|
| 11:00 | [37] AresGW: Unveiling New Gravitational Wave Events with Machine Learning | Ms KOLONIARI, Alexandra Eleni |
| 11:35 | [10] Symphony of Spacetime: Tuning into EMRI resonances with LISA | Dr DESTOUNIS, Kyriakos |
| 12:10 | [18] Searching for gravitational waves in real LIGO noise using neural networks | ZELENKA, Ondřej |
| 12:30 | [52] Importance of Noise Filtering for Improving the False Alarm Rate in Gravitational Wave Events | KOURSOUNPA, Evdokia Chrysovalanti |

Thursday 4 September 2025

Morning: Multimessenger Astronomy - Amphitheater 1 (09:00 - 10:40)

-Conveners: Nikolaos Stergioulas

| time | [id] title | presenter |
|-------|--|----------------------------|
| 09:00 | [68] Extreme Tidal Disruption Events as probes of Nuclear Star Cluster | Prof. KARAS, Vladimir |
| 09:50 | [80] Modeling the strong-field dynamics of binary neutron stars | Prof. BERNUZZI, Sebastiano |

Morning: Gravitational Waves & Neutron Stars - Amphitheater 1 (11:00 - 12:55)

-Conveners: Sebastiano Bernuzzi

| time | [id] title | presenter |
|-------|---|---|
| 11:00 | [103] 10 years of Gravitational-Wave Tests of GR | Dr AGATHOS, Michalis |
| 11:35 | [97] Resonance-induced eccentricity in spherical extreme-mass-ratio inspirals | Dr ELENI, Areti Prof. APOSTOLATOS, Theodoros |
| 11:55 | [60] Gravitational waves from a curvature-induced phase transition of a Higgs-portal dark matter sector | MANTZIRIS, Andreas |
| 12:15 | [8] Exploring Composition of Neutron Star Matter with Astrophysical Observations | CHAR, Prasanta |
| 12:35 | [55] Universal description of a neutron star's surface and its key global properties: A machine learning approach for nonrotating and rapidly rotating stellar models | Mr PAPIGIOTIS, Grigorios |