

Monday

Auditorium 1

8:45–9:30 Opening session

9:30–10:20 Stars askew in the heavens: the centenary of Eddington's eclipse expeditions, **Clifford M. Will**.

10:20–10:50 **Coffee Break**

10:50–11:40 Post precision cosmology, **Licia Verde**

11:40–12:30 The detection of compact binary mergers using the Advanced LIGO and Advanced Virgo detectors, **Edward K. Porter**

12:30–13:20 Gravitational physics from quantum information constraints, **Mark Van Raamsdonk**

13:20–15:00 **Lunch Break**

Parallel Sessions Before Coffee Break

A1: Exact solutions and their interpretation

Room 4

15:00–15:30 Solutions With A Geodesic, Single Weyl Pnd: From Vacuum To Aligned Einstein–Maxwell, **Wylleman, L.**

15:30–15:45 The Study of Non–expanding Plebański–Demiański Solutions, **Hruska, O.**

15:45–16:00 Gravitomagnetism in the Lewis cylindrical metrics, Costa, **L. Filipe O.**

16:00–16:15 Observational properties of the gamma metric, **Malafarina Daniele**

16:15–16:30 Round Null Surfaces In Kerr Space–Time, **Argañaraz, M. A.**

A2: Mathematical relativity and classical gravitation

Auditorium 3A

15:00–15:15 Strong Cosmic Censorship In De Sitter Space, **Reall, Harvey**

15:15–15:30 Approximating Gravitational Collapse For Dust With Vlasov Matter, **Andréasson Håkan**

15:30–15:45 A Perturbative Approach To The Construction Of Initial Data On Compact Manifolds, **Valiente Kroon, Juan A.**

15:45–16:00 Two Non–Normal Spectral Problems In Black Hole Spacetimes, **Jaramillo, José Luis**

16:00–16:15 On The Inexistence Of Solitons In Einstein–Maxwellscalar Models, **Oliveira, João**

16:15–16:30 Posters

A3: Modified theories of gravity (theoretical aspects)

Auditorium 3B

15.00–15.15 Positivity In The Sky, **Noller, Johannes**

15.15–15.30 Beyond Horndeski Gravity: Phenomenology And Parameter Estimation, **Traykova, Dina**

15.30–15.45 Latest Constraints On Modified Gravities From Large–Scale Structures, **De La Cruz Dombritz, Álvaro**

15.45–16.00 Screenings In Modified Gravity: A Perturbative Approach, **Cervantes, Jorge**

16.00–16.15 Mgpt: A Code For Perturbation Theory In Modified Gravity, **Rodriguez–Meza, Mario A.**

16:15-16:30 Unravelling The Effective Fluid Approach For Modify Gravity And Dark Energy Models, **Arjona Fernández, Rubén**

B1: Relativistic astrophysics

Room 2

15:00-15:30 Black Hole Accretion And Relativistic Jets, **Ramesh Narayan**

15:30-15:45 General-Relativistic Kinetic Plasma Simulations Of Black-Holes Magnetospheres And Jets, **Kyle Parfrey**

15:45-16:00 Power Of Magnetically Arrested Advective Accretion Flows To Explain Ulxs And Blazars, **Branibrata Mukhopadhyay**

16:00-16:15 Two-Temperature Advective Transonic Accretion Flows Around Black Holes, **Silpha Sardar**

16:15-16:30 Thin Accretion Disk Of Distorted Schwarzschild Black Hole, **Shokoufe Faraji**

Posters Relativistic Wind Accretion Onto A Schwarzschild Black Hole, **A. Aguayo-Ortiz**

Posters Evolution Equations Of Elastic Fluid In General Relativity, **Mikael Normann**

B2: Numerical relativity

Room 1

15:00-15:30 New vistas in the simulation of compact binary systems, **Luis Lehner**

15:30-15:45 Spectre - A New Discontinuous Galerkin Code For Solving General Relativistic Partial Differential Equations, **Harald Pfeiffer**

15:45-16:00 The Sxs Collaboration Catalog Of Binary Black Hole Simulations, **Leo Stein**

16:00-16:15 Exploring Precessing Binaries With Numerical Relativity, **Mark Hannam**

16:15-16:30 Posters

B3: Approximations, perturbation theory, and their applications

Room 3

15:00–15:30 Does Geometric Optics Depend On Geometry?, **Abraham Harte**

15:30–15:45 Perturbations Of Locally Rotationally Symmetric Cosmologies, **Michael Bradley**

15:45–16:00 A New Perspective On Gravitational Perturbations Of Spherically Symmetric Spacetimes, **Andrzej Rostworowski**

16:00–16:15 Revisiting Black-Hole Perturbation Theory: The Hyperboloidal Slice Approach, **Rodrigo Panosso Macedo**

16:15–16:30 Higher Order Perturbations Of The Reissner-Nordström Black Hole, **Mieszko Rutkowski**

Posters Stability Of L-Boson Stars Under Linear Perturbations, **Argelia Bernal**

Posters Filtering Condition For Some Of Viable Field Theories, **Abd El Fady B. Morcos**

Posters Second-Order Self-Force Calculations: A Status Report, **Adam Pound**

Posters Cosmological Perturbations In The Regge-Wheeler Formalism, **Andrzej Rostworowski**

Posters The Geometry Of Small Causal Diamonds, **Jinzhao Wang**

C2: Gravitational waves: Searches, data analysis, parameter estimation and multi-messenger astronomy

Auditorium 1

14:45–15:00 Virgo Detector Characterization Activities During The O3 Run: From Latency To Gravitational-Wave Event Validation, **Arnaud N.**

15:00–15:15 Intermediate-Mass Binary Black Hole Search With Advanced LIGO And Virgo, **Vivekananthaswamy G.**

15:15–15:30 Missed Astrophysical Signal In The Gw150914 Event, **Moreschi, O.**

15:30–15:45 Search For Gravitational Lensing Signatures In LIGO–Virgo Binary Black Hole Events, **Li, T.**

15:45–16:00 Search For Sub–Threshold Lensed Images Of Gravitational Wave Observations, **Mcisaac, C.**

16:00–16:15 A Highly Spinning And Aligned Binary Black Hole Merger In The Advanced LIGO First Observing Run, **Roulet, J.**

16:15–16:30 New BBH events in the LIGO/VIRGO O1 and O2 data discovered by an independent analysis, **Zackay, B.**

C4: Concepts and Research for Future Detectors

Room 5

15:00–15:30 Room Temperature Optomechanical Squeezing, **Nancy Aggarwal**

15:30–15:45 Development Of A Dc Adaptive Actuator For Optical Aberration Correction In Future Gravitational Wave Detectors, **Lorenzo Aiello**

15:45–16:00 Optomechanical Accelerometers In High Qg, **John Carter**

16:00–16:15 Measurement Of Thermal Noise In A Solid In Non–Equilibrium Steady States, **Alvise Pizzella**

16:15–16:30 Next Challenges In Gravitational Wave Astronomy, **David Blair**

C8: Education and Public Outreach on Gravitational Wave Astronomy

Room 7

15:00–15:30 Education And Public Outreach Activities Of The LIGO Scientific Collaboration, **Keitel, David**

15:30–15:45 Summary Of Virgo Outreach Activities, **Conti, Livia**

15:45–16:00 An Overview On The Outreach Activities In The Virgo Group In Valencia, **Cordero–Carrión, Isabel**

16:00–16:15 Training Ambassadors For High Impact Outreach, **Williamson, Kathryn**

16:15–16:16 Posters A New Gravitational Wave Lecture–Tutorial For “Astro 101”,
Williamson, Kathryn

C9: Experimental gravitation

Room 6

15:00–15:30 Determination of the Newtonian Gravitational Constant G with Angular–Acceleration–Feedback Method, **Xue, Chao**

15:30–15:45 Microscope: A Test Of Equivalence Principle On The Way To Final Results,
Rodrigues, M

15:45–16:00 Analyzing Lorentz Violation With Short–Range Gravitational Experiments,
Shao, Chenggang

16:00–16:15 Time–Delay Interferometry: Challenges To Modeling And Simulating
Instrumental Imperfections For LISA, **Bayle J.–B.**

16:15–16:30 Posters

D4: Quantum fields in curved space-time, semiclassical gravity, quantum gravity phenomenology, and theoretical aspects of analogue gravity

Room 8

15:00–15:15 A Perturbative Perspective On Self–Supporting Wormholes, **Brianna Grado–White**

15:15–15:30 Quantum Memory For Rindler Supertranslations, **Sanved Kolekar**

15:30–15:45 Local And Covariant Flow Relations For Ope Coefficients In Curved
Spacetime, **Mark Klehfoth**

15:45–16:00 Hadamard Renormalisation Of Charged Scalar Fields, **Visakan Balakumar**

16:00–16:30 Posters

Parallel Sessions After Coffee Break

A1: Exact solutions and their interpretation

Room 4

17:00-17:15 Spherical Black Holes In Quadratic Gravity: Bachian Generalization Of The Schwarzschild-(A)Ds Solution, **Podolsky, Jiri**

17:15-17:30 Spherically Symmetric Geometries In Quadratic Gravity: Field Equations, Explicit Spacetimes, Physical Interpretation, **Svarc, R**

17:30-17:45 Exact Almost Universal Solutions to Higher-Order Gravities, **Martin Kuchynka**

17:45-18:00 Ideal Characterization Of Cosmological And Black Hole Spacetimes, **Khavkine, I.**

18:00-18:15 Some New Exact Solutions Of Type D Admitting Maximal G_3 And G_4 , **Ziad, Muhammad (Mz)**

18:15-18:30 Projective invariance and the Schwarzschild solution, **Olmo, Gonzalo J.**

18:30-18:45 On The Integrability Of Einstein'S Equation And Killing Tensors, **Batista, C.**

A2: Mathematical relativity and classical gravitation

Auditorium 3A

17:00-17:15 On The Geometry Of Globally Hyperbolic Spacetimes With Timelike Boundary, **Sánchez, Miguel**

17:15-17:30 Cosmic No-Hair In Spherically Symmetric Black Hole Spacetimes, **Natario, Jose**

17:30-17:45 Rotating Clouds Of Charged Particles In General Relativity, **Thaller, Maximilian**

- 17:45–18:00 Towards A Fully General Relativistic Geodesy, **Laemmerzahl, Claus**
- 18:00–18:15 The Future Is Not Always Open, **Steinbauer, Roland**
- 18:15–18:30 Shadow Of Black Holes At Cosmological Distances, **Tsupko, Oleg**
- 18:30–18:45 Correspondence Between Sonic Points Of Radiation Flow And Photon Surfaces, **Koga, Yasutaka**
- 18:45–19:00 Black Holes Parameters From Redshifts And Blueshifts Of Photons Emitted By Geodesic Particles Orbiting Around Them, **Becerril Barcenas Ricardo**

A3: Modified theories of gravity (theoretical aspects)

Auditorium 3B

- 17:00–17:15 Poster Dynamical Aspects Of Anisotropic Cosmological Models In $F(R,T)$ Gravity, **Mishra, Bivudutta**
- Poster Second Order Form Of The Generalized Field Theory, **Morcos, Abd El Fady**
- Poster Wormholes In \mathbb{R}^2 -Gravity Within The $F(R; T)$ Formalism, **Sahoo, Parbati**
- Poster Massive Gravity Illustrated In The Mandelbrot Set, **Dickau, Jonathan**
- Poster Quantum–Mechanical Solution Of Singularity Problem In The Logarithmic Superfluid Theory Of Physical Vacuum, **Zloshchastiev**
- Poster Various Windows To Understand Extra Dimensions, **Chakraborty, Sumanta**
- Poster Gravitational Collapse Of Massive Stars In $F(X)$ Theory, **Kausar**
- Poster Study Of Stellar Structure In Modified Theory Of Gravity, **Waseem, Arfa**
- Poster Gravitational Decoupled Anisotropic Stars In Modified Gauss–Bonnet Gravity, **Saba, Saadia**
- Poster Nonminimal Couplings, Gravitational Waves, And Torsion In Horndeski’S Theory, **Valdivia, Omar**
- Poster Perturbation Theory For Biased Tracers In Modified Gravity, **Cervantes, Jorge**

17:15-17:30 Parametrizing Modified Gravities With Vector Degrees Of Freedom:
Anisotropic Growth And Lensing, **Aparicio, Miguel**

17:30-17:45 Aspects Of Nonlocal Cosmology Models, **Park, Sohyun**

17:45-18:00 Modified Einstein Gravity To Unify Under- And Over-Luminous Type Ia
Supernovae, **Mukhopadhyay, Banibrata**

18:00-18:15 Phantom Energy As A Transient Phenomenon Avoiding Cosmic Doomsday In
F(R) Gravity, **Sahoo, Pradyumn**

18:15-18:30 Dynamics Of Inflation And Dark Energy From F(R,G) Gravity, **Banerjee,
Shreya**

18:30-18:45 Bouncing Cosmological Solutions In Scalar - Tensor Gravity, **Verbin, Yosef**

B1: Relativistic astrophysics

Room 2

17:00-17:15 Implications Of Event Horizon Telescope Observations For General
Relativity, Accretion Physics And Jets, **Roman Gold**

17:15-17:30 Accretion In A Dynamical Kerr Spacetime And Spinning Up Of The Black
Hole In Collapsar, **Agnieszka Janiuk**

17:30-17:45 Simulating Poynting Dominated Energy Flows Around Magnetars And
Black Holes, **Jens Florian Mahlman**

17:45-18:00 Self-Gravitating Tori Around Black Holes, **Patryk Mach**

18:00-18:15 Choked Accretion: A Hidrodynamical Jet-Launching Mechanism,
Alejandro Aguayo-Ortiz

18:15-18:30 Probing Near-Horizon Scales In General Relativistic
Magnetohydrodynamics Simulations, **R. Anantua**

18:30-18:45 Magnetized Accretion Disks Around Kerr Black Holes With Scalar Hair,
Sergio Gimeno-Soler

18:45–19:00 On The Possibilities Of Shocks In Relativistic Accretion And Wind Flows,
Mondal Soumen

B2: Numerical relativity

Room 1

17:00–17:15 Numerical Relativity Methods For Cosmological N-Body Simulations,
David Daverio

17:15–17:30 Cosmic Censorship And The Fate Of Spheroidal Collapse, **William East**

17:30–17:45 Numerical Simulations Of Spacetime Singularities, **David Garfinkle**

17:45–18:00 The Physics Of Black Hole Binaries: Geodesic Properties, Quasinormal Modes And Interaction With Fundamental Fields -- Part I, **Miguel Zilhao**

18:00–18:15 The Physics Of Black Hole Binaries: Geodesic Properties, Quasinormal Modes And Interaction With Fundamental Fields -- Part II, **Taishi Ikeda**,

18:15–18:30 A Catalogue Of Multi-Mode Waveforms For Black-Hole Coalescence, **Sascha Husa**

C2: Gravitational waves: Searches, data analysis, parameter estimation and multi-messenger astronomy

Auditorium 1

17:00–17:15 The Pycbc Search Pipeline For Binary Merger Signals In O3, **Dent, Thomas**

17:15–17:30 Gravitational Wave Detection: A Fully Bayesian Approach, **Ashton, G.**

17:30–17:45 Digging Compact Binary Populations Out Of The Noise, **Veitch, J.**

17:45–18:00 Machine Learning To Exploit LIGO/Virgo Single-Detector Data Taking Periods, **Trovato A.**

18:00–18:15 Improving The Chances Of Gravitational-Wave Detection From Core-Collapse Supernovae With A Single Interferometer, **Cavaglia, M.**

18:15-18:30 A Nonlinear Analysis Of Gravitational Waves From Core-Collapse Supernovae, **Di Palma, Irene**

18:30-18:45 Low Latency Gw Search And Multi-Messenger Astronomy, **Wen, L.**

18:45-19:00 Going Beyond Two Messengers, **Maka, Z.**

C4: Concepts and Research for Future Detectors

Room 5

17:00-17:30 Prospects For Measuring Neutron Star Equation Of State Using Gravitational Waves, **Denis Martynov**

17:30-17:45 Pre-Stabilized Laser System At A Wavelength Of 1550Nm For Future Gravitational-Wave Detectors, **Fabian Meylahn**

17:45-18:00 Cancellation Of Gravity Noise In Underground Detectors, **Francesca Badaracco**

18:00-18:15 Molecular Adsorbed Layer Formation On Cooled Mirrors And Its Impacts On Cryogenic Gravitational Wave Telescopes, **Kunihiko Hasegawa**

18:15-18:30 Quantum Back Action Cancellation In The Audio Band, **John Cripe**

C5: LISA and other Space Based Detectors

Room 3

17:00-17:15 Laser Ranging Interferometer On Grace Follow-On: Current Status, **Fernandez Barranco, G**

17:15-17:30 Optical Simulations For Space Interferometry, **Gudrun Wanner**

17:30-17:45 LISA Pathfinder Final Noise Performance: Effect Of Disturbances On The Low Frequency Noise And Projection To LISA, **Castelli, E**

17:45-18:00 Instrumental Noise Transients In LISA, **Slutsky, J**

18:00–18:15 Listening To Gravity With LISA From Incomplete Measurements: A Bayesian Data Augmentation Method, **Baghi, Quentin**

18:15–18:30 The Data And Diagnostics Subsystem For LISA, **Nofrarias, M**

18:30–18:45 Space+Ground Multiband Detections. How Many?, **Gerosa, D**

C8: Education and Public Outreach on Gravitational Wave Astronomy

Room 7

17:00–17:30 Bringing General Relativity To Upper Secondary Schools: Design And Evaluation Of A Digital Learning Environment, **Kersting, Magdalena**

17:30–17:45 Ozgrav Public Outreach Virtual And Mixed Reality Toolkits, **Bailes, Matthew**

17:45–18:00 Playing With Gravitational Wave Detectors: Exhibits And Apps For Public Engagement With Gravitational Wave Research, **Gettings, Conner**

18:00–18:15 Improving The Black Hole Hunter Educational Game For The Advanced Detector Era, **Mcisaac, Connor**

C9: Experimental gravitation

Room 6

17:00–17:30 Testing General Relativistic Clock Effects In The Vicinity Of The Earth, **Laemmerzahl, Claus**

17:30–17:45 Space–Time Approach To Locomotion In Deformable Environments, **Laguna, Pablo**

17:45–18:00 Can Mond Explain The Data Scattering Of "Big G"?, **Klein, Norbert**

18:00–18:15 The Experiment Of Gravitational Mass Defect, **Dong Jiang**

18:15–18:30 Quantum Entanglement Witness Of Quantum Gravity, **Mazumdar, Anupam**

D4: Quantum fields in curved space-time, semiclassical gravity, quantum gravity phenomenology, and theoretical aspects of analogue gravity

Room 8

17:00–17:15 On Running Couplings From Adiabatic Regularization, **Antonio Ferreira**

17:15–17:30 Gauge Without Gauge: From Physical To Emergent Gauge Symmetries, **Luis Garay**

17:30–17:45 Curved Spacetime Effective Field Theory (Ceft) – Formalism And Some Applications, **Lukasz Nakonieczny**

17:45–18:00 Laws Of Black Hole Thermodynamics In Semiclassical Gravity, **Bruno Arderucio Costa**

18:00–18:15 Black Hole Volume And Enthalpy, **Jose Lemos**

18:15–18:30 Thermodynamics Of Lorentzian Taub–Nut Spacetimes, **David Kubiznak**

18:30–18:45 Gravity, Null Surfaces And Thermodynamics, **Sumanta Chakraborty**

18:45–19:00 Confronting Quantum Gravity With Data Through Its Interplay With Matter, **Astrid Eichhorn**

Tuesday

Auditorium 1

9:00–9:50 Our Galactic Center: A unique laboratory for the physics and astrophysics of black holes, **Andrea Ghez**

9:50–10:40 The unbearable lightness of spacetime: testing the nature of dark compact objects, **Paolo Pani.**

10:40–11:10 **Coffee Break**

- 11:10–12:00 Mathematical progress in general relativity, **Jonathan Luk**.
- 12:00–12:50 Multimessenger astrophysics with gravitational waves, **Katerina Chatziioannou**.
- 12:50–14:30 **Diversity Lunch**

Parallel Sessions Before Coffee Break

A1: Exact solutions and their interpretation

Room 4

14:30–14:45 The Type D Horizons And The Petrov Type D Spacetimes, **Lewandowski, Jerzy**

14:45–15:00 Stability Of Anisotropic Homogeneous Cylinder, **Muhammad Sharif**.

15:00–15:15 Compact Objects And The Swampland, **Kunihito Uzawa**

15:15–15:30 Energy Extraction From An Extremal Rotating Electrovacuum Black Hole Through Charged Particle Collisions, **Hejda, Filip**

15:30–15:45 Influence Of Intrinsic Spin In The Formation Of Singularities For Inhomogeneous Effective Dust Space–Times, **Luz, Paulo**.

15:45–16:00 Dynamical Spacetimes In Einstein–Maxwell–Dilaton Theory And Cosmic Censorship, **Rocha, Jorge V**.

16:00–16:15 Generating Spiky Solution Of Einstein'S Field Equations With The Stephani Transformation, **Moughal, Muhammad Zubair Ali**

16:15–16:30 Anisotropic Solutions For Stellar Configurations, **Sobia Sadiq**

A2: Mathematical relativity and classical gravitation

Auditorium 3A

14:30–14:45 Spherically Symmetric Static Solutions Of Einstein–Vlasov And Their Perturbation Spectrum, **Gundlach, Carsten**

14:45-15:00 Equations For General Thin Shells, **Senovilla, José M M**

15:00-15:15 Mass Inflation And Strong Cosmic Censorship For The Spherically Symmetric Einstein-Maxwell-scalar Field System With A Cosmological Constant And An Exponential Price Law, **Drumond Silva, Jorge**

15:15-15:30 Higher Order Linear Stability And Instability Of Reissner-Nordstrom's Cauchy Horizon, **Girão, Pedro**

15:30-15:45 Asymptotically Ads Solitons And Their Stability, **Maliborski, Maciej**

15:45-16:00 Spherically Symmetric, Steady States Of Newtonian Self-Gravitating Elastic Matter, **Alho, Artur**

16:00-16:15 Critical Phenomena And Cosmic Censorship: A Semilinear Wave Model, **Suárez Fernández, Isabel**

16:15-16:30 The Schrodinger-Newton-Hooke Equation - A Non-Relativistic Limit For Ads Perturbations, **Ficek, Filip**

A3: Modified theories of gravity (theoretical aspects)

Auditorium 2

14:30-15:00 Self-interactions and spontaneous black hole scalarization. **Berti, Emanuele**

15:00-15:15 Spontaneous Black Hole Scalarization. **Okada Da Silva, Hector**

15:15-15:30 Spontaneous scalarization of black holes in scalar-tensor theories with derivative couplings. **Minamitsuji, Masato**

15:30-15:45 Dynamically viable Asymptotically Flat Black Holes with Scalar Hair: Superradiant Growth vs. Scalarisation. **Herdeiro, Carlos**

15:45-16:00 Nonspherical Horizons from Black Hole Scalarization. **Radu, Eugen**

16:00-16:15 Deformed Compact Objects in General Relativity and beyond. **Raposo, Guilherme**

16:15–16:30 Tidal Love Numbers of Black Holes and Neutron Stars in the Presence of Higher Dimensions: Implications of GW170817. **Bose, Sukanta**

A4: Complex and conformal methods in classical and quantum gravity

Room 5

14:30–15:00 Aspects Of Perturbation Theory With A Cosmological Constant. **Tim Adamo**

15:00–15:15 Construction Of Ads-Like Space-Times: The Tracefree Matter Case. **Diego Carranza-Ortiz**

15:15–15:30 A Novel Characterisation Of Gravitational Radiation In Asymptotically Flat Space-Times, **Francisco Fernández-Álvarez**

15:30–16:00 Gravity as a Double Copy of Gauge Theory. **Ricardo Monteiro**

16:00–16:15 Characterization Of N-Dimensional Kerr-De Sitter At Null Infinity And Its Limit. **Carlos Peon-Nieto**

16:15–16:30 A Quantum Theory For The Classical Graviton. **Carlos Kozameh**

B1: Relativistic astrophysics

Room 2

14:30–14:45 Neutron Stars Mergers Out Of The Blur: Modeling Turbulent Scales In Large Eddy Simulations, **Daniele Viganò**

14:45–15:00 Short Gamma-Ray Bursts And Multimessenger Astrophysics, **Riccardo Ciolfi**

15:00–15:15 Effect Of Neutrinos On Binary Neutron Star Thermodynamics, **A. Endrizzi**

15:15–15:30 Study Of Non-Linear Mode-Tide Coupling Binary Neutron Stars In Relativistic Formalism, **Fatemeh Hossein**

15:30–15:45 Deformations Of Neutron Stars With Elastic Crusts, **Fabian Gittins**

15:45–16:00 Mass Ejection From Remnants Of Binary Neutron Star Mergers, **Sho Fujibayashi**

16:00–16:15 Binary Hybrid Star Mergers And The Phase Diagram Of Quantum Chromodynamics, **Matthias Hanauske**

16:15–16:30 Triggering Magnetar Outbursts In 3D Force-Free Simulations, **F. Carrasco**

Posters Pulsars In Compact Orbits Around Sgr, **Walid Majid**

B2: Numerical relativity

Room 1

14:30–14:45 A Multi-Messenger Analysis Of Neutron Star Mergers Employing Numerical Relativity Simulations, **Tim Dietrich**

14:45–15:00 Post Merger Dynamics Of Binary Neutron Star Mergers, **Michele Pasquali**

15:00–15:15 Kelvin'S Theorem And Hamilton–Jacobi Fluid Dynamics In Gravitational Wave Astrophysics, **Charalampos Markakis**

15:15–15:30 Signatures From First-Order Phase Transitions In Neutron Star Mergers, **Elias Most**

15:30–15:45 Numerical General Relativistic Simulations: Collapse Collapse Supernovae And Neutron Stars Astrophysics, **Patrick Cheong**

15:45–16:00 Gravitational Waves From Tidally-Induced F-Modes: Probing Neutron Star Structure, **Roman Gold**

16:00–16:15 Towards Efficient, Resistive, Multi-Fluid Simulations Of Neutron Star Mergers, **Alex Wright**

16:15–16:30 Ellis Wormhole Numerics In Maximal Isotropic Coordinates, **Seth Olsen**

B4: Cosmology: Theory and observations

Room 8

14:30-14:45 Testing the Inflationary Particle Content with Primordial Gravitational Waves, **Matteo Fasiello**

14:45-15:00 Geometrical Destabilization, Sidetracked Inflation and Swampland Conjectures, **Sebastien Renaux-Petel**

15:00-15:15 Non-Gaussianities in Multi-Field Inflation with Strongly Non-Geodesic Motion, **Lucas Pinol**

15:15-15:30 Non-Gaussian CMB and Statistics Beyond Polyspectra, **Spyros Sypsas**

15:30-15:45 The Viability of Chaotic Inflation in a Generalized Galileon Scenario, **Nelson Videla**

15:45-16:00 A Possible Higher-Dimensional Alternative to Scalar-Field Inflationary Theory, **Chad Middleton**

16:00-16:15 Initial Conditions for Cosmic Inflation after Non-Singular Bounce, **Anupam Mazumdar**

16:15-16:30 Posters

B5: Gravitational waves and Cosmology

Room 3

14:30-15:00 Review of Standard Sirens With Ground-Based Interferometers, **Holz, Daniel**

15:00-15:30 Review of Standard Sirens With LISA, **Tamanini, Nicola**

15:30-15:45 Studying Modified Gravitational-Wave Propagation With LISA, **Belgacem, Enis**

15:45-16:00 Cosmological Parameters And Dark Energy With Advanced Gravitational-Wave Detectors, **Dirian, Yves**

16:00-16:15 H_0 Inference With Gravitational Wave Standard Sirens: A Mock Data Challenge, **Qi, Hong**

16:15-16:30 Cosmology With Gravitational Waves And Galaxy Catalogues, **Ghosh, Archisman**

C2: Gravitational waves: Searches, data analysis, parameter estimation and multi-messenger astronomy

Auditorium 1

14:30-14:45 Intercalibration Of Advanced Ligo And Advanced Virgo For The Third Observing Run O3, **Esteves, D.**

14:45-15:00 The Simulation Of Gravitational Wave Emission From Core-Collapse Supernovae, **Powell, J**

15:00-15:15 There And Back Again: Learning Forward/Inverse Solutions In Gravitational-Wave Inference, **Chua, Alvin J. K.**

15:15-15:30 A Nonparametric Approach To Gravitational-Wave Inference Of The Neutron Star Equation Of State, **Landry, Philippe**

15:30-15:45 Distinguishing Binary Neutron Star From Neutron Star-Black Hole Mergers With Gravitational Waves, **Chen, H.-Y.**

15:45-16:00 Detectability Of R-Modes In Binary Neutron Star Inspirals, **Samajdar, Anuradha**

16:00-16:15 Constraining F-Modes In Binary Neutron Star Inspirals With Gravitational Waves, **Schmidt, Patricia**

16:15-16:30 Pick The Right One: Bayesian Model Selection On Catalogs Of Gravitational-Wave Events, **Gerosa, D**

C8: Education and Public Outreach on Gravitational Wave Astronomy

Room 7

15:00-15:30 Education And Public Outreach Efforts By Pulsar Timing Array Collaborations, **Hazboun, Jeffrey S**

15:30–15:45 Gravitational Wave Outreach With The International Pulsar Timing Array,
Perrodin, Delphine

15:45–16:00 The Pulsar Search Collaboratory, **Williamson, Kathryn**

16:00–16:15 Qfirs – An Integrated Structured Educational Programme For Doctoral Students And Postdocs In Hannover And Braunschweig, **Kawazoe, Fumiko**

C9: Experimental gravitation

Room 6

15:00–15:30 Testing The Gravitational Inverse–Square Law With Torsion Pendulum In Hust **Yang, Shanqing**

15:30–15:45 Getting Close To Gravity: Developing A Superconducting Torsion Balance To Test The Inverse Square Law Of Gravity **Gettings, C.**

15:45–16:00 Experimental Studies Of Gravity With Slow Neutrons, **Kitaguchi, Masaaki**

16:00–16:15 Setting Stronger Dark Sector Limits On Monopole–Monopole And Monopole–Dipole Interactions Using Cylinders **Bsaibes, T**

16:15–16:30 Newton–V Experiment: Test Of Gravitational Inverse Square Law At A Micrometer Scale **Shibaguchi, Hiroyuki**

D4: Quantum fields in curved space-time, semiclassical gravity, quantum gravity phenomenology, and theoretical aspects of analogue gravity

Auditorium 3B

14:30–15:00 How To Hide A Cosmological Constant, **Steven Carlip**

15:00–15:15 Quantum Incompleteness Of Inflation, **Job Feldbrugge**

15:15–15:30 Qualitative Dynamics Of Quantum Cosmology From Loop Quantum Gravity, **Anzhong Wang**

15:30–15:45 Black Hole Entropy And Gravitational Wave Observations: A Mechanism For Small Primordial Spins, **Eugenio Bianchi**

15:45–16:00 A New Look At Remnants As Dark Matter, **Francesca Vidotto**

16:00–16:15 Self-Gravitating Black Hole Scalar Wigs And The $M_{\text{Bh}}-\Sigma$ Relation, **Juan Barranco**

16:15–16:30 Observable Traces Of Non-Metricity: New Constraints On Metric-Affine Gravity, **Adrià Delhom I Latorre**

Parallel Sessions After Coffee Break

A1: Exact solutions and their interpretation

Room 4

17:00–17:15 Causality Violating Lightlike Trips In Godel'S Universe, **Nolan, Brien**

17:15–17:30 Scissors-And-Paste With Lambda: The Geometric Picture, **Steinbauer, Roland**

17:30–17:45 Creation And Evolution Of Traversable Wormhole In Flrw Universe, **Kim, Sung-Won**

17:45–18:00 Thin-Shell Toroidal T^2 -Wormhole, **Vladimir Dzhunushaliev**

18:00–18:15 A Novel Strong Gravitational Lensing Feature From Wormholes, **Suvankar, Paul**

18:15–18:30 Interpretation Of Exact Inflationary Solutions Using Induced Gravity Scenario, **Saleem, Rabia**

A2: Mathematical relativity and classical gravitation

Auditorium 3A

17:00–17:15 Symmetries Of Vacuum Spacetimes With A Compact Cauchy Horizon Of Constant Non-Zero Surface Gravity, **Rácz, István**

17:15-17:30 Type D Conformal Initial Data, **García-Parrado, Alfonso**

17:30-17:45 Global Existence Of Solutions To The Spherically Symmetric Einstein-Scalar Field System, **Mena, Filipe**

17:45-18:00 Completeness Of Local Gauge Invariant Observables On Cosmological And Black Hole Spacetimes, **Khavkine, Igor**

18:00-18:15 Existence And Uniqueness Of Rigidly Rotating Stars To Second Order In Perturbation Theory In Gr, **Raül Vera**

18:15-18:30 Near Horizon Geometry Equation, Degenerate Killing Horizons, **Lewandowski, Jerzy**

18:30-18:45 Quasinormal Modes Of Dirac And Gravitational Fields In Generalized Nariai Spacetimes, **Joás Da Silva Venâncio**

18:45-19:00 Spinorial Formalism And Symmetries In Six Dimensions, **Batista, Carlos**

A3: Modified theories of gravity (theoretical aspects)

Auditorium 2

17:00-17:15 Poster Quantum Mechanics Of The Interior Of The Russo-Susskind-Thorlacius Black Hole **Daghigh**

Poster Teleparallel Bigravity **Blixt**

Poster Spontaneous Scalarisation Of Charged Black Holes: Coupling Dependence And Dynamical Features **Pombo**

Poster Gravitational Radiation From The Inspiral Of Compact Binaries Based On A Yukawa-Type Addition To The Newtonian Potential, **Larrañaga**

Poster Extra-General Relativity **Coumbe**

Poster Ghosts In Metric-Affine Gravity, **Delhom I Latorre**

Poster Chronology Protection Problem In Modified Kerr Newman Spacetime **Gutti**

Poster Premetric Teleparallel Gravity As A Framework For Lorentz And Parity Symmetry Violation Models. **Itin**

Poster Universal And Almost Universal Spacetimes In Higher-Order Gravities **Pravda**

Poster Generalized Tachyonic Teleparallel Cosmology **Bahamonde**

Poster Gravitational Waves In Symmetric Teleparallel Gravity, **Levi Said**

17:15-17:30 Rotating Black Holes In Higher Order Gravity Crisostomi, **Marco**

17:30-17:45 Rotating Black Holes In The Cubic Galileon Theory Van Aelst, **Karim**

17:45-18:00 Leading Higher-Derivative Corrections To Kerr Geometry Cano, **Pablo**

18:00-18:15 Static, Spherically Symmetric Solutions To Quadratic Gravity, **Pravdova Alena**

18:15-18:30 Compact Objects In Einstein-Cartan Theory: The Effects Of Intrinsic Spin In Celestial Bodies **Luz, Paulo**

18:30-18:45 Regular Black Holes In Ricci-Based Theories Of Gravity, **Rubiera-Garcia, Diego**

A4: Complex and conformal methods in classical and quantum gravity

Room 5

17:00-17:30 Total Characteristics And The Conformal Einstein Field Equations. **Juan Valiente Kroon**

17:30-17:45 The Conformal Einstein Field Equations With Massless Vlasov Matter. **Maximilian Thaller**

17:45-18:00 The Complex And Projective Geometry Of Penrose Limits. **George Sparling**

B1: Relativistic astrophysics

Room 2

17:00-17:15 Luminosity Selection In Gamma Ray Bursts, **S. Banerjee**

17:15-17:30 Let Us Watch A Collapsing Star: How Does It Look?, **Hirotaaka Yoshiko**

- 17:30–17:45 Light Ring Stability In Ultra-Compact Objects, **P. Cunha**
- 17:45–18:00 Differentially Rotating Quark Stars In General Relativity, **Enping Zhou**
- 18:00–18:15 The Stability Properties Of Differentially Rotating Neutron Stars And Strange Stars, **P. Szewczyk**
- 18:15–18:30 On The Maximum Mass Of Differentially Rotating Neutron Stars And Strange Stars, **Dorota Rosinska**

B2: Numerical relativity

Room 1

- 17:00–17:15 Constructing High Precision Numerical Binary Black Hole Initial Data, Georgios Doulis, **Georgios Doulis**
- 17:15–17:30 Improvements On Initial Data For Spinning Neutron Star Binaries, **Hannes Rüter**
- 17:30–17:45 The Impact Of Junk Radiation On Numerical Relativity Waveforms, **Deirdre Shoemaker**
- 17:45–18:00 Parabolic-Hyperbolic Formulation Of The Black Holes Initial Data - Numerical Studies, **Anna Nakonieczna**
- 18:00–18:15 Initial Data For Orbiting Charged Binary Black Holes With Arbitrary Spins, **Nathan Johnson-McDaniel**
- 18:15–18:30 Hyperbolic Relaxation Method For Elliptic Equations In Numerical Relativity, **Bernd Bruegmann**
- 18:30–18:45 Surrogate Model Of The Waveform And Remnant Properties Of Precessing Binary Black Holes, **Vijay Varma**

B4: Cosmology: Theory and observations

Room 8

- 17:00–17:15 The Umami Chaplygin Model, **Maria Ortiz-Baños**

- 17:15-17:30 Galaxy Correlations at the Smallest Scales, **Vicent Martínez**
- 17:30-17:45 Relativistic Cosmological Large-Scale Structures at One-Loop, **Radouane Gannouji**
- 17:45-18:00 Sunyaev-Zeldovich Effect as a Tool to Probe Fundamental Physics, **Ivan de Martino**
- 18:00-18:15 General Gravitational Lenses of Cosmological Systems, **Ezequiel Boero**
- 18:15-18:30 Towards Precision Tests of the Cosmological Principle: Inhomogeneous Backreaction versus Λ CDM, **David Wiltshire**

B5: Gravitational waves and Cosmology

Room 3

- 17:00-17:15 A Statistical Constraint On The Hubble Constant From The Latest Gravitational Wave Detections, **Gray, Rachel**
- 17:15-17:30 Measuring The Hubble Constant With Neutron Star Black Hole Mergers, **Vitale, Salvatore**
- 17:30-17:45 Joint Cosmological Inference Of Standard Sirens And Gravitational Wave Weak Lensing, **Congedo, Giuseppe**
- 17:45-18:00 Constraining The Fraction Of Compact Dark Matter From Micro Lensing Of Gravitational Waves, **Ganguly, Apratim**
- 18:00-18:15 Probing Dark Matter At Ligo And Beyond, **Jung, Sunghoon**
- 18:15-18:30 Probing The Large Scale Structure With Gravitational-Wave Observations Of Binary Black Holes, **Vijaykumar, Aditya**

C2: Gravitational waves: Searches, data analysis, parameter estimation and multi-messenger astronomy

Auditorium 1

- 17:00-17:15 Unmodeled Source Reconstruction With Gravitational Waves, **Macas, Ronaldas**

17:15-17:30 Discosing The Features Of Transient Gravitational Waves Independently From Waveform Models, **Lazzaro, Claudia**

17:30-17:45 Exploring The Measurability Of Precession, **Hoy Charlie**

17:45-18:00 Eccentricity Distributions Of Eccentric Binary Black Holes In Galactic Nuclei, **Raffai, P**

18:00-18:15 Quantifying The Importance Of Higher Harmonics In Binary Black Hole Observations, **Hannam, Mark**

18:15-18:30 Distance-Inclination Angle Measurements For Non-Optimally Oriented Binary Black Holes, **Chandra Kant Mishra**

18:30-18:45 Understanding The Evolution Of Stellar-Mass Black Hole Binaries, **Berry, Christopher P L**

18:45-19:00 Unraveling Formation Channels Of Binary Black Holes, **Bouffanais, Y**

C4: Concepts and Research for Future Detectors

Auditorium 3B

17:00-17:30 An Experiment To Demonstrate Frequency-Dependent Squeezing With Epr Entanglement For Gravitational Waves Detectors, **Fiodor Sorrentino**

17:30-17:45 Fiber-Based Laser Systems For 3G Detectors: State-Of-The-Art And Outlook, **Phillip Booker**

17:45-18:00 Micromechanical Resonators In The Whitelight Cavity For Improved Gravitational Wave Detectors, **Li Ju**

18:00-18:15 Newtonian Noise Estimates Using Data From The Homestake Array, **Andrew Matas**

18:15-18:30 Newtonian Noise Cancellation With Deep Learning, **Alessio Cirone**

C8: Education and Public Outreach on Gravitational Wave Astronomy

Room 7

17:00-17:30 Advocacy And Outreach Activities Of The LISA Consortium, **Hendry, Martin**

17:30-17:45 The European Research Council – Funding Opportunities For Bright Minds, **Oswald, Christian**

17:45-18:00 Black Holes Tend (Not) To Exist! Some Personal Reflections About Public Dissemination On Gravity, **Pani, Paolo**

18:00-18:15 Of Funnels, Rivers And Trampolines: The Perils Of Conveying Spacetime Curvature To The Uninitiated, **Emparan, Roberto**

C9: Experimental gravitation

Room 6

17:00-17:30 Experimental Search For New Gravity-Like Interactions In The Nanometer Range, **Kamiya, Yoshio**

17:30-17:45 A New Class Of Experiments On The True Relativistic Nature Of The One-Way Propagation Of Light **Unnikrishnan. C. S.**

17:45-18:00 Gravitational Properties Of Light, **Raetzel, Dennis**

18:00-18:15 A Comparison Between The Gravitational Wave And The X-Ray Spectroscopy Approaches, **Cardenas-Avendano, Alejandro**

18:15-18:30 Extreme Gravity With X-Rays: A Study Into The Nature Of Compact Objects Using X-Ray Reflection Spectroscopy, **Nampalliwar, Sourabh**

Wednesday

Auditorium 1

9:00-9:50 Accelerated expansion in cosmology: problems and progress, **Eva M. Silverstein.**

9:50–10:40 Pulsar Timing Arrays: the next frontier of gravitational wave astronomy, **Timothy Pennucci** and **Stephen Taylor**.

10:40–11:10 **Coffee Break**

11:10–12:50 **Award Ceremony**

12:50–14:30 **Lunch Break**

Parallel Sessions Before Coffee Break

A1: Exact solutions and their interpretation

Auditorium 2

14:30–14:45 The 2-Body Problem In 2+1 Spacetime Dimensions, **Gundlach, Carsten**

14:45–15:00 Robinson-Trautman Solutions In (2+1) Dimensions, **Saa, A.**

15:00–15:15 Petrov Type-N Solution For The Null-Surface Formulation Of General Relativity In 2+1 Dimensions, **Harriott, Tina A.**

15:15–15:30 Exact Black-Hole Formation With A Conformally Coupled Scalar Field In Three Dimensions, **Maeda, Hideki**

15:30–15:45 Extended Thermodynamics And Complexity In Gravitational Chern-Simons Theory, **Frassino, A M**

15:45–16:00 Cclp Solution Obtained From A Modified Plebanski-Demianski Ansatz, **Ferraro, R.**

16:00–16:15 Exact Solutions Of 5D Kaluza-Klein Model With Perfect Fluid Equation Of State, **Singh, Vijay**

16:15–16:30 Evolution Of Thin Shells In D-Dimensional General Relativity, **Ramirez, M. A.**

Posters

Wormholes Without Exotic Matter In Eddington-Inspired Born-Infeld Gravity, **Shaikh, R**

A Class Of Integrable Metrics Coupled To Gauge Fields, **Almeida, G L**

Cosmic Cable, **Maclaurin, Colin**

Static Conformal Models For Anisotropic Charged Fluids, **Manjonjo Am**

Embedding With Vaidya Geometry, **Nikolaev, A. V.**

Examples Of Naked Singularity Formation In Einstein Vacua, **Zhang, Xuefeng**

Embedding The Stationary Spacetimes Into Brans-Dicke Cosmology Via Conformal Transformations, **Kazici, D**

Rotating Black Holes In Eddington-Inspired Born-Infeld Gravity, **Menchón, C.**

Inhomogeneous, Massless Gauge Fields In Bianchi Cosmologies, **Ben David Normann**

A2: Mathematical relativity and classical gravitation

Auditorium 3A

14:30-14:45 Ehlers-Kundt Conjecture About Gravitational Waves And Dynamical Systems, **Flores, José Luis**

14:45-15:00 Strong Cosmic Censorship In Charged Black-Hole Spacetimes, **Destounis, Kyriakos**

15:00-15:15 Separability In Kerr-Nut-(A)Ds Spacetime, **Krtous, Pavel**

15:15-15:30 Stability Of The Milne Model With Matter, **Fajman, David**

15:30-15:45 Globally Conserved Currents From Approximate Killing Vectors: Dynamics And Initial Data, **Feng, Justin**

15:45-16:00 Smooth Gowdy-Symmetric Generalised Taub-Nut Solutions In Einstein-Maxwell Theory, **Hennig, Joerg**

16:00-16:15 Gravitational Energy-Momentum And Thermodynamics, **Acquaviva, Giovanni**

16:15-16:30 Poster.

A3: Modified theories of gravity (theoretical aspects)

Auditorium 1

14.30-15.00 Hamiltonian Vs Stability In Alternative Theories Of Gravity (Invited),
Esposito-Farese, Gilles

15.00-15.15 On The Local Well-Posedness Of Horndeski Theories, **Kovács, Áron**

15.15-15.30 Well-Posed Cauchy Formulation For Einstein-Aether Theory, **Sarbach, Olivier**

15.30-15.45 Positive Signs In Modified Gravity, **Melville, Scott**

15.45-16.00 On Lorentz-Invariant Spin-2 Theories, **Kimura, Rampei**

16.00-16.15 The Equivalence Principles And The Nature Of Gravitation, **Holman, Marc**

16.15-16.30 Torsion In The Raychaudhuri Equations And In Spacetime
Thermodynamics, **Speziale, Simone**

Posters Modified General Relativity And The Centenary Einstein Equations
Unnikrishnan

Posters Metric And Metric-Affine Theories Of Mond With Curvature-Matter Couplings.
Mendoza

Posters Eliminating Singularities Using Non-Einsteinian Phases: The Problem Of
Closed Timelike Curves And Dirac Strings In Vacuum Gravity, **Sengupta**

Posters Collapsing Radiation Shells In Einstei-Gauss-Bonnet Gravity, **Brassel**

B1: Relativistic astrophysics

Room 2

14:30-14:45 New Gravitational Lens Equations For Black Holes With Angular
Momentum, **E.F. Bore**

14:45-15:00 The Gravitational Magnus Effect, **L.Filipe O. Costa**

15:00-15:15 Beyond Force-Free Electrodynamics: Effective Field Theory And Bosonization, **Samuel E. Gralla**

15:15-15:30 Probing Extreme Gravity With X-Ray Burst Oscillations, **Hector O. Silva**

15:30-15:45 Can We Observe Spherical Photon Orbits In Near-Extremal Kerr Black Holes?, **Hideki Ishihara**

15:45-16:00 The Propagation Delay In The Timing Of A Pulsar Orbiting A Supermassive Black Hole, **E. Hackmann**

16:00-16:15 Equilibrium Of Charged Perfect Fluid Near Black Hole, **Audrey Trova**

16:15-16:30 Bondi Accretion In The Spherically Symmetric Johannsen-Psaltis Spacetime, **Anslyn John**

Posters Weak Lensing In A Plasma Medium And Gravitational Deflection Of Massive Particles Using The Gauss-Bonnet Theorem, **E. Gallo**

Posters Estimating Neutron Star Crust-Core Lag Evolution Using A Hidden Markov Model, **M. Millhouse**

B2: Numerical relativity

Room 1

14:30-14:45 L-Boson Stars, **Miguel Alcubierre**

14:45-15:00 Dynamics Of Scalar Fields Around Black Holes, **Juan Carlos Degollado**

15:00-15:15 Numerical Simulations Of Boson Stars, **Miren Radia**

15:15-15:30 Using Grchombo To Simulate Boson Stars, **Robin Croft**

15:30-15:45 Dynamical Formation Of Proca Stars And Quasi-Stationary Solitonic Objects, **Fabrizio Di Giovanni**

15:45-16:00 Non-Linear Stability Of Rotating Proca Stars, **Nicolas Sanchis-Gual**

16:00-16:15 Massive Klein-Gordon Fields On Hyperboloidal Slices, **Shalab Gautam**

16:15–16:30 Reaching Infinity: Free Hyperboloidal Evolution Using Conformal Methods In Spherical Symmetry, **Alex Vano-Vinuales**

B3: Approximations, perturbation theory, and their applications

Room 3

14:30–14:45 Towards High Precision Ringdown Fitting, **Lorena Magaña Zertuche**

14:45–15:00 A Precession Model Tuned To Pn, Perturbation Theory And Numerical Relativity, **Eleanor Hamilton**

15:00–15:15 Massive Tensor Field Perturbations On Extremal And Near-Extremal Static, **Kodai Ueda**

15:15–15:30 Moving Black Holes: Energy Extraction, Absorption Cross-Section And The Ring Of Fire, **Rodrigo Vicente**

15:30–15:45 The Motion Of Localized Sources In General Relativity: Gravitational Self-Force From Quasilocal Conservation Laws, **Marius Oltean**

15:45–16:00 Second-Order Self-Force Calculations: A Status Report, **Adam Pound**

16:00–16:15 A Prospective Method For Calculating The Second-Order Gravitational Self-Force In A Kerr Background Spacetime To Model EMRIs, **Andrew Spiers**

16:15–16:30 Gravitational Self-Force And The Hunt For Extreme-Mass-Ratio, **Samuel Upton**

B4: Cosmology: Theory and observations

Room 8

14:30–14:45 Local Dynamics of Ultralight Bosonic Dark Matter, **Francisco Guzman**

14:45–15:00 Testing BEC Dark Matter with Gravitational Waves, **Dimitar Ivanov**

15:00–15:15 The Quantum Character of the Scalar Field Dark Matter, **Tonatiuh Matos**

15:15-15:30 Scalar Dark Matter Candidate During Postinflationary Epoch, **José Manuel Sánchez Velázquez**

15:30-15:45 Ultra-light boson particles as dark matter candidates: boson mass and self-interaction, **Luis Urena-Lopez**

15:45-16:00 Dynamical Systems In Perturbative Cosmology, **Artur Alho**

16:00-16:15 Cosmological Evolution of Perturbations in a Model of Superfluid Dark Matter, **Sayantani Bera**

16:15-16:30 The Abundance of PBHs depends on the Shape of the Inflationary Power Spectrum, **Ilia Musco**

B5: Gravitational waves and Cosmology

Room 4

14:30-14:45 Measuring The Impact Of The Gravitational Wave Intrinsic Geometry On The Hubble Constant Measure, **Simone Mastrogiovanni**

14:45-15:15 Gravitational Waves And Early Universe Cosmology, **Figueroa, Daniel**

15:15-15:30 Gravitational Wave Production From Preheating: Parameter Dependence, **Torrentí, Francisco**

15:30-15:45 Spectator Fields On A Roller Coaster: Gravitational Waves From Short-Lived Cosmic Strings, **Bettoni, Dario**

15:45-16:00 Primordial Black Holes As Dark Matter, **García-Bellido, Juan**

16:00-16:15 Probing The Existence Of Ultralight Bosons With A Single Gravitational-Wave Measurement, **Hannuksela, Otto**

16:15-16:30 Posters

C3: Progress and Challenges in Advanced Ground Based Detectors

Room 7

- 14:30-15:00 Status And Performance Of The Advanced Virgo Detector During The Observation Run 3, **Arnaud, N.**
- 15:00-15:15 Stability Of Low Loss Substrates For Coating Research: From Edge Effect To Ageing, **Lumaca, D**
- 15:15-15:30 The Advanced Virgo Interferometer Sensing And Control For The O3 Scientific Run, **Mantovani, M.**
- 15:30-15:45 Operating Detectors Out Of Equilibrium Can Improve Sensitivity?, **Gammaitoni, L**
- 15:45-16:00 High-Quality Oxide Coating Materials For Gravitational-Wave Detectors: Optical And Mechanical Properties Correlation And Future Developments, **Amato A.**
- 16:00-16:15 Towards Advanced Virgo Plus, **Flaminio, R**
- 16:15-16:30 Posters

C6: Gravitational waves: Relativity and fundamental physics

Auditorium 3B

- 14:30-14:45 Constraining The Neutron-Matter Equation Of State With Gravitational Waves, **Forbes, M.**
- 14:45-15:00 Constraining Nuclear Matter Parameters With GW170817, **Yagi, Kent**
- 15:00-15:15 The Tidal Deformability Of An Anisotropic Compact Star: Implications For GW170817, **Biswas, Bhaskar**
- 15:15-15:30 Compact Star Of Holographic Nuclear Matter And GW170817, **Lin, Feng-Li**
- 15:30-15:45 Parametrized Tests Of Gravity: From Stellar Structure To Gravitational Waves, **Silva, Hector O.**
- 15:45-16:00 Tidal Resonance In Extreme Mass-Ratio Inspirals, **Bonga, Beatrice**
- 16:00-16:15 Evolution Of Highly Eccentric Binary Orbits With Radiation Reaction, **Tucker, A.**

16:15–16:30 Scattering Of Scalar, Electromagnetic, And Gravitational Waves From Binary Systems, **Annulli, L.**

C7: Multi-Messenger Astronomy of Gravitational Wave Sources

Room 5

14:30–15:00 GW170817: Astrophysical Results And Implications For Cosmic Nucleosynthesis, **Daniel Siegel**

15:00–15:15 What Else Can We Learn From Kilonova Observations?, **Szabolcs Marka**

15:15–15:30 Binary Neutron Star Mergers As Short Gamma-Ray Burst Central Engines, **Riccardo Ciolfi**

15:30–15:45 Short Gamma Ray Bursts, Jets, And Kilonovae, **Agnieszka Janiuk**

15:45–16:00 A Luminosity Distribution For Kilonovae Based On Short Gamma-Ray Burst Afterglows, **Stefano Ascenzi**

16:00–16:15 Are Kilonovae Standardizable Candles?, **Rahul Kashyap**

16:15–16:30 Electromagnetic Counterparts Of Neutron Star Mergers, **Nedora Vsevolod**

Posters **Kiranjyot Gill**, Gravitational Waves From Fallback Accretion And Black Hole Formation In Long Gamma-Ray Bursts

Posters **Fabricia Pereira**, Merger Rates And The Electromagnetic Counterparts To Misaligned Supermassive Black Hole Binaries

D1: Loop quantum gravity and spin foams

Room 6

14:30–15:00 The Mukhanov–Sasaki Hamiltonian In The Context Of Adiabatic Vacua And The Lewis–Riesenfeld Invariant, **Kristina Giesel**

15:00–15:15 Towards The Understanding Of Quantum Cosmology From Loop Quantum Gravity, **Anzhong Wang**

15:15-15:30 New Cosmological Dynamics In Quantum Reduced Loop Gravity, **Gioele Botta**

15:30-15:45 The Emergent Inflationary Universe In Quantum Reduced Loop Gravity: Primordial Perturbations And Their Power Spectra, **Javier Olmedo**

15:45-16:00 Some Aspects Of Phenomenology Of Loop Quantum Gravity For Cosmology And Black Holes, **Flora Moulin**

16:00-16:15 Loop Quantum Gravity For Axisymmetric Spacetimes, **Jorge Pullin**

16:15-16:30 From Quantum Reference Systems To Quantum General Covariance, **Philipp Hoehn**

Parallel Sessions After Coffee Break

A2: Mathematical relativity and classical gravitation

Auditorium 3A

17:00-17:15 Quasinormal Mode Orthogonality I: Bilinear Form On Hertz Potentials, **Green, Stephen**

17:15-17:30 Quasinormal Mode Orthogonality Ii: Application To Kerr, **Zimmerman, Peter**

17:30-17:45 Completeness of Local Gauge Invariant Observables On Cosmological And Black Hole Spacetimes, **Igor Khavkine**

17:45-18:00 Pulsar Timing In Extreme Mass Ratio Binaries, **Kimpson, Tom**

18:00-18:15 An Entropy-Area Law For Neutron Stars Near The Black Hole Threshold, **Yunes, Nicolas**

18:15-18:30 Aspects Of The Negative Mode Problem In Quantum Tunneling With Gravity, **Lavrelashvili, George**

18:30–18:45 Zermelo Navigation, Spacetimes And Finsler Geometry, **Javaloyes, Miguel Angel**

18:45–19:00 Clouds In A Static Fluid, **Benone, Carolina**

A3: Modified theories of gravity (theoretical aspects)

Auditorium 1

17:00–17:15 Posters

17:15–17:30 Towards Scale Invariant Infinite Derivative Theory Of Gravity, **Mazumdar, Anupam**

17:30–17:45 Non-Singular And Ghost-Free Infinite Derivative Theory With Torsion, **Maldonado Torralba, Francisco José**

17:45–18:00 Nonlocal Generalizations Of Gravity And Galilean Theories, **Buoninfante, Luca**

18:00–18:15 Testing Nonlocal Gravity With Lunar Laser Ranging, **Finke, Andreas**

18:15–18:30 Lorentz Symmetry Breaking In Gravity, **Petrov, Albert**

18:30–18:45 Constraints On Einstein-Aether Theory After GW170817, **Wang, Anzhong**

B1: Relativistic astrophysics

Room 2

17:00–17:15 An Extension Of The Relxill X-Ray Reflection Model For Non-Kerr Spacetimes, **Askar Abdikamalov**

17:15–17:30 Extreme-Mass-Ratio Inspirals Produced By Tidal Capture Of Binary Black Holes, **X. Chen**

17:30–17:45 Constraints On Parameterized Post-Einsteinian Framework From Binary Pulsar, **Remya Nair**

17:45–18:00 Weak Lensing In Terms Of Curvature Scalars And Energy–Momentum Tensor For Pure Gravity And Plasma Media, **E. Gallo**

18:00–18:15 Looking For Signatures Of Black Hole Mimickers With The Event Horizon Telescope, **H. Olivares**

18:15–18:30 Gr Effects On Hill Stability, **H. Suzuki**

B2: Numerical relativity

Room 1

17:00–17:15 The Spanish Supercomputing Network (RES) in the European context, **Jordi Mas, RES Project Officer, BSC**

17:15–17:30 The Blackholes@Home Project: Black Hole Binaries On The Desktop Computer, **Zachariah Etienne**

17:30–17:45 The Threshold For Primordial Black Holes: Dependence On The Shape Of The Cosmological Perturbation, **Ilia Musco**

17:45–18:00 Sphericalnr: Numerical Relativity In Spherical Coordinates With The Einstein Toolkit **Vassilios Mewes**

18:00–18:15 Numerical Studies Of Binary Black Hole (Bbh) Mergers Through Quasi-Local Horizon Characteristics, **Anshu Gupta**

18:15–18:30 A Catalog Of Numerical Relativity And Hybrid Waveforms Of Eccentric Black–Hole Binary Systems, **Antoni Ramos**

B3: Approximations, perturbation theory, and their applications

Room 3

17:00–17:15 Regularisation Of The Self–Force For Generic Orbits In Kerr Spacetime, **Anna Heffernan**

17:15–17:30 Time Domain Method For The Green Function In Schwarzschild Spacetime, **Conor O’Toole**

17:30–17:45 Faster Emri Waveforms, **Niels Warburton**

17:45–18:00 Is There Chaos During Extreme Mass–Ratio Inspirals In Dynamical Chern–Simons Gravity?, **Alejandro Cardenas–Avendano**

18:00–18:15 Dissipation In Extreme Mass Ratio Binaries With A Spinning Secondary, **Chris Kavanagh**

18:15–18:30 Extended Test Bodies With Spin In Curved Spacetime, **Georgios Lukes–Gerakopoulos**

B4: Cosmology: Theory and observations

Room 8

17:00–17:15 The Dipole of the Galaxy Bispectrum, **Roy Maartens**

17:15–17:30 Constraints on millicharged dark matter and axion–like particles from timing of radio waves, **Laura Sberna**

17:30–17:45 New Parametrized Equation of State for Dark Energy Surveys, **Celia Escamilla–Rivera**

17:45–18:00 Measuring Angular Diameter Distances of to $z \sim 10$ with the Cosmic Infrared Background Fluctuations, **Fernando Atrio–Barandela**

18:00–18:15 Testing Gravity with J–PAS, **Antonio Maroto**

18:15–18:30 Attractor Cosmology and Initial Conditions Beyond the Poles, **Sotirios Karamitsos**

B5: Gravitational waves and Cosmology

Room 4

17:00–17:15 Dilatonic Imprints On Exact Gravitational Wave Signatures, **Kubiznak, David**

17:15–17:30 Dark Energy After GW170817, **Crisostomi, Marco**

17:30-17:45 Gravitational Wave Afterglow Of Stellar Collapse In Massive Scalar-Tensor Gravity, **Sperhake, Ulrich**

17:45-18:00 Graviton-Photon Oscillation Beyond Gr, **Martin-Moruno, Prado**

18:00-18:15 Strong Equivalence Principle And Gravitational Wave Polarizations In Horndeski Theory, **Hou, Shaoqi**

18:15-18:30 Primordial Gravitational Waves In Horndeski Gravity, **De Araujo, José Carlos**

C3: Progress and Challenges in Advanced Ground Based Detectors

Room 7

17:00-17:30 Advanced LIGO Detectors In O3, **Buikema, A**

17:30-17:45 Latest Status Of Kagra, **Shinkai, Hisaaki**

17:45-18:00 Cryogenic Mirror System In Kagra, **Tomaru, Takayuki**

18:00-18:15 Prospects For Upgrading The Kagra Gravitational Wave Telescope, **Michimura, Yuta**

18:15-18:30 Zaiga: Zhaoshan Long-Baseline Atom Interferometer Gravitation Antenna, **Gao, Dongfeng**

18:30-18:45 Three Methods For Characterizing Thermo-Optic Noise In Optical Cavities, **Gretarsson, E**

C5: LISA and other Space Based Detectors

Auditorium 2

17:00-17:15 GW Missions Using Ranging-With-Timing And Zaiga-Ce GW-Detection Prototype, **Ni, Wei-Tou**

17:15-17:30 Verifying LISA Core Technology On Ground: A Hexagonal Optical Bench, **Thomas Schwarze**

17:30-17:45 Phase Metrology System For LISA, **Esteban Delgado**

17:45-18:00 Multiband GW Parameter Estimation: A Study Of Future Detectors, **Grimm, S.**

18:00-18:15 Time-Delay Interferometry: Modeling And Simulating Laser Frequency Noise In LISA, **Bayle, J.-B.**

18:15-18:30 Test Mass Charging And Discharging In LISA, **Wass, Peter**

18:30-18:45 LISA Charge Management System: Discussion And On-Ground Testing Results, **Russano, G**

C6: Gravitational waves: Relativity and fundamental physics

Auditorium 3B

17:00-17:15 Tests Of General With The Binary Black Hole Signals From The LIGO-Virgo Catalog GWTC-1, **Cabero Müller, M**

17:15-17:30 Binary Pulsar Constraints On Massless Scalar-Tensor Theories Using Bayesian Statistics, **Anderson, David**

17:30-17:45 Tests Of General Relativity With GW170817, **Sennett, Noah**

17:45-18:00 Rapid Identification Of Continuous Gravitational-Wave Signals, **La Rosa, Iuri**

18:00-18:15 Testing The Strong Equivalence Principle With Binary Pulsars And Gravitational Waves, **Shao, Lijing**

18:15-18:30 Gravitational Radiation And The Evolution Of Gravitational Collapse In Cylindrical Symmetry, **García-Parrado, Alfonso**

C7: Multi-Messenger Astronomy of Gravitational Wave Sources

Room 5

17:00-17:15 Analysing Beaming Profiles Of Short Gamma-Ray Bursts Using Gravitational Waves, **Fergus Hayes**

17:15-17:30 Revisiting The Lower Bound On Tidal Deformability Derived By At 2017Gfo, **Kenta Kiuchi**

17:30-17:45 Constraining The Neutron Star Equation Of State Using Multi-Band Independent Measurements Of Radii And Tidal Deformabilities, **Margherita Fasano**

17:45-18:00 Multi-Messenger Search For Binary Neutron Star Mergers, **Alexander Nitz**

18:00-18:15 The Contribution Of Integral To The Search Of Gamma-Ray Gw Couterparts, **Carlo Ferrigno**

18:15-18:30 Search For Gravitational Waves Associated With Gamma-Ray Bursts During The Second Advanced LIGO-Virgo Observing Run, **Ronaldas Macas**

18:30-18:45 Gravitational Wave Astronomy Prospectives For Core-Collapse Supernovae Populations, **Kiranjyot Gill**

D1: Loop quantum gravity and spin foams

Room 6

17:00-17:30 Spin Foams And Emergent Gravity, **Antonia Zipfel**

17:30-17:45 Correlations In Spinfoam Cosmology, **Francesca Vidotto**

17:45-18:00 Entanglement Entropy In Lqg: Analytical And Numerical Results, **Eugenio Bianchi**

18:00-18:15 An Update On Progress Towards A Satisfactory Quantum Dynamics For Lqg, **Madhavan Varadarajan**

18:15-18:30 Conformal Boundary Field Theory For 3D Lqg, **Wolfgang Wieland**

18:30-18:45 Connection Dynamics Of Weyle Gravity, **Yongge Ma**

Thursday

Auditorium 1

9:00–9:50 The future of ground-based gravitational-wave detection: instruments and science, **Lisa Barsotti**.

9:50–10:40 Progress in analytic methods for the two-body problema in gravity, **Rafael Porto**.

10:40–11:10 **Coffee Break**

11:10–12:00 Analogue Hawking radiation?, **Matt Visser**.

12:00–12:50 Black Hole dynamics at large D, **Shiraz Minwalla**

12:50–14:30 **Lunch Break**

Parallel Sessions Before Coffee Break

A3: Modified theories of gravity (theoretical aspects)

Auditorium 1

14.30–15.00 Can We Probe Planckian Corrections At The Horizon Scale With Gravitational Waves?, **Yunes, Nicolas**

15.00–15.15 Second Law Protection Theorem For Lorentz-Violating Black Holes, **Louko, Jorma**

15.15–15.30 Angular Momentum Loss For A Binary System In Einstein-Aether Theory, **Saffer, Alexander**

15.30–15.45 Gravitational Waves In Massive Gravity: Waveforms From Extreme-Mass-Ratio Mergers, **Maselli, Andrea**

15.45–16.00 Nonlinear Dynamics Of Horndeski Theories In Spherical Collapse, **Ripley, Justin**

16.00–16.15 Gravitational Collapse In Bimetric Gravity, **Högås, Marcus**

16:15-16:30 Electromagnetism And Hidden Vector Fields In Modified Gravity Theories: Spontaneous And Induced Vectorization, **Annulli, Lorenzo**

B1: Relativistic astrophysics

Room 2

14:30-14:45 Polarization Effects In The Kerr Space-Time, **Pelykh Volodymyr**

14:45-15:00 Dirac Stars In The Presence Of Maxwell And Proca Fields, **Vladimir Dzhunushaliev**

15:00-15:15 Relativistic Soundproof Models, **I. Hawke**

15:15-15:30 A Hyperbolic Theory Of Relativistic Conformal Dissipative Fluids, **Oscar Reula**

15:30-15:45 Charge Screened Boson Stars In A Spontaneous Broken U(1) Gauge Theory, **Tatsuya Ogawa**

15:45-16:00 Rotating Clumps Of Scalar Field Dark Matter, **Miguel C. Ferreira**

16:00-16:15 Hawking Radiation And Entropy Of A Black Hole In Modified Gravity From Quantum Tunneling Approach, **Guqiang Li**

16:15-16:30 General relativity and the rotation curves of UGC 128 and NGC 2403, **Nadja Magalhaes**

B2: Numerical relativity

Room 1

14:30-14:45 Studies Of Standing And Dissipative Shocks Around Rotating Black Holes. **Soumen Mondal**

14:45-15:00 Numerical Study On The Gregory-Laflamme Instability Of Black Strings By Using Ccz4 Formulation, **Chenxia Gu**

15:00-15:15 Non Linear Spherical Collapse With Relativistic Hydrodynamics In A Cosmological Background, **François Staelens**

15:15-15:30 Dendro-Gr: A Scalable Framework For Computational General Relativity,
David Neilsen

15:30-15:45 Kerr Black Holes With Synchronised Scalar Hair And Higher Azimuthal
Harmonic Index, **Jorge Delgado**

15:45-16:00 Analytical And Numerical Treatment Of Perturbed Black Holes In Horizon-
Penetrating Coordinates, **Maitraya Bhattacharyya**

16:00-16:15 Bbh & "Em" Fields: Em Counterparts And Beyond Gr, **Pablo Bosch**

16:15-16:30 On The Asymptotics Of Initial Data By Evolutionary Solvers, **Karoly Csukás**

B3: Approximations, perturbation theory, and their applications

Room 3

14:30-15:00 Classical Gravity From Quantum Loop, **Pierre Vanhove**

15:00-15:15 Energetics Of Two-Body Hamiltonians In Post-Minkowskian Gravity,
Andre Antonelli

15:15-15:30 Spinning-Black-Hole Scattering And The Test-Black-Hole Limit At Second
Post-Minkowskian Order, **Justin Vines**

15:30-15:45 Spin-Perturbed Orbits Near Black Holes, **Vojtech Witzany**

15:45-16:00 Black Hole Equations Of Motion In The Null Gauge With Back Reaction Due
To Radiation, **Oswaldo Moreschi**

16:00-16:15 Spin And Center Of Mass Comparison Between The Pn Approach And The
Asymptotic Formulation, **Carlos Kozameh**

16:15-16:30 Balance Equations For Linear Momentum And Center Of Mass Of Isolated
Post-Newtonian Systems, **Luc Blanchet**

C2: Gravitational waves: Searches, data analysis, parameter estimation and multi-messenger astronomy

Auditorium 3B

14:30-14:45 Enriching The Symphony Of Gravitational Waves From Binary Black Holes By Tuning Higher Harmonics, **Cotesta, Roberto**

14:45-15:00 The Phenomx Suite Of Phenomenological Waveform Models, **Pratten, Geraint**

15:00-15:15 Parameter Estimation With Higher Modes And Precession, **Khan, Sebastian**

15:15-15:30 Phenomenological Models Of Neutron Star Black Hole Binaries, **Thompson, Jonathan**

15:30-15:45 A Black Hole Waveform Generator Trained On Numerical Relativity Waveforms, **Williams, D.**

15:45-16:00 Gravitational Wave Luminosity Peak Of Compact Binary Mergers, **Zappa, F.**

16:00-16:15 Are Current Binary Black Hole Waveforms Accurate Enough For Future Detectors? **Pürrer, Michael**

16:15-16:30 Python Reduced Order Quadrature Builder Pyroq And Fast Inference On GWs From Eccentric Compact Binaries, **Hong Qi**

C3: Progress and Challenges in Advanced Ground Based Detectors + C4: Concepts and Research for Future Detectors

Room 5

14:30-15:00 Gravitational Wave Astronomy With The Next Generation Of GW Observatories, **Sathyaprakash, Bangalore**

15:00-15:30 Cosmic Explorer, **Matt Evans**

15:30-16:00 Global Scenario: GWIC Activities, **David Shoemaker**

16:00-16:30 Einstein Telescope: The European 3Rd Generation Gravitational Wave Observatory, **Michele Punturo**

C5: LISA and other Space Based Detectors

Room 4

- 14:30-15:00 LISA Science And The LISA Science Group, **Elena Rossi**
- 15:00-15:15 Time-Delay Interferometry And Clock Noise Calibration For LISA, **Hartwig, O.**
- 15:15-15:30 Extreme Mass Ratio Inspiral (Emri) Search Techniques For The LISA Mission, **Key, J.S.**
- 15:30-15:45 Acquiring The Inter-Satellite Laser Link In The Grace Follow-On Laser Ranging Interferometer, **Francis, S**
- 15:45-16:00 Progress With The Tianqin Project, **Mei, Jianwei**
- 16:00-16:15 Intermediate Mass Ratio Inspirals in Galactic Nuclei, **Manuel Arca Sedda**

C6: Gravitational waves: Relativity and fundamental physics

Auditorium 3A

- 14:30-14:45 Testing The Multipole Structure Of Compact Binaries Using Gravitational Wave Observations, **Kastha, Shilpa**
- 14:45-15:00 A Bayesian Method To Test The Binary Black Hole Nature Of Gravitational Wave Events By Measuring Spin-Induced Quadrupole Moments, **Krishnendu N V.**
- 15:00-15:15 Constraining Parity Violation In Gravity With Compact Binary Mergers, **Perkins, Scott**
- 15:15-15:30 Probing Parity Violation With Spin-Precessing Binaries, **Loutrel, Nicholas**
- 15:30-15:45 Constraints On Higher-Order Curvature Corrections Using Gravitational Wave Observations, **Sennett, Noah**
- 15:45-16:00 Exploring Strong Field Deviations From General Relativity Via Gravitational Waves, **Trevino, Gabriel**
- 16:00-16:15 Hidden-Sector Modifications To Gravitational Waves From Binary Inspirals, **Yunes, Nico**
- 16:15-16:30 Probing The Accretion Disk With The Gravitational Wave, **Mondal Soumen**

D2: Gravitational aspects of String Theory

Room 6

14:30–15:00 Cosmic censorship in anti de Sitter spacetime, **Gary Horowitz**

15:00–15:15 Moduli space of five-dimensional supersymmetric black holes, **James Lucietti**

15:15–15:30 de Sitter holography and the t-tbar deformation, **Eva Silverstein**

15:30–15:45 Black hole instabilities and violation of the weak cosmic censorship conjecture, **Pau Figueras**

15:45–16:00 Dynamics of black holes in a confining background, **Hans Bantilan**

16:00–16:15 Bulk Reconstruction of the Code Subspace, **Sebastian Fischetti**

16:15–16:30 Localised and nonuniform thermal states of sym on a circle, **Oscar Dias**

D3: Causal sets, causal dynamical triangulations, non-commutative geometry, asymptotic safety, and other approaches to quantum gravity

Room 7

14:30–15:00 Asymptotic Safety - Recent Achievements And Links To Other Approaches, **Benjamin Knorr**

15:00–15:15 Effective Self-Consistent Solutions From Asymptotically Safe Gravity, **Alessia Platania**

15:15–15:30 Singularity Avoidance For Collapsing Quantum Dust In The Lemaître-Tolman-Bondi Model, **Tim Schmitz**

15:30–15:45 Perturbatively renormalizable quantum gravity, **Tim Morris**

15:45–16:00 Simulating Non-Commutative Geometries - A Focused Talk On Fuzzy Geometries, **Lisa Glaser**

16:00–16:15 Exploring Quantum Ricci Curvature In Nonperturbative Quantum Gravity, **Renate Loll**

16:15–16:30 Noncommutative Gravity With Self–Dual Variables, **Mairi Sakellariadou**

D4: Quantum fields in curved space-time, semiclassical gravity, quantum gravity phenomenology, and theoretical aspects of analogue gravity

Room 8

14:30–14:45 Phenomenological Aspects Of Black Holes Beyond General Relativity, **Stefano Liberati**

14:45–15:00 Metrology Of Horizons, **Raul Carballo—Rubio**

15:00–15:15 Singularity Avoidance: Possibilities And Implications, **Francesco Di Filippo**

15:15–15:30 Quantum Strong Energy Inequality And The Hawking Singularity Theorem, **Eleni–Alexandra Kontou**

15:30–15:45 Semiclassical Stellar Hydrostatic Equilibrium, **Julio Arrechea**

15:45–16:00 Echoes From The Abyss: A Highly Spinning Black Hole Remnant For The Binary Neutron Star Merger GW170817, **Jahed Abedi**

16:00–16:15 Probing Quantum Gravity With Gravitational Waves, **Antonino Marciano**

16:15–16:30 A Self–Consistent Analysis Of Black Hole Horizons, **Daniel Terno**

Parallel Sessions After Coffee Break

ISGRG Assembly - Auditorium 1

A2: Mathematical relativity and classical gravitation

Auditorium 3A

17:00–17:15 Gowdy Spacetimes With A Positive Cosmological Constant, **Knopik, Jerzy**

17:15–17:30 Surface Charges In Tetrad Variables, **Speziale, Simone**

17:30-17:45 On Necessary And Sufficient Conditions For Strong Hyperbolicity, **Reula, Oscar**

17:45-18:00 Perturbations Of Hypersurfaces Of Arbitrary Causal Character, **Reina, Borja**

18:00-18:15 Gr Computations With The Python-Based Free Computer Algebra System Sagemath, **Gourgoulhon, Eric**

18:15-18:30 Thermodynamics And Gravity, **Santiago, Jessica**

18:30-18:45 New Thermodynamic Identities For Five-Dimensional Black Holes, **Lucietti, James**

18:45-19:00 Absorption Of Electromagnetic Plane Waves By Rotating Black Holes, **Crispino, Luis**

A3: Modified theories of gravity (theoretical aspects)

Auditorium 2

Posters Gravitational Waves From Black Hole Binaries In Quadratic Gravity, **Kim**

Posters On The Solutions Of The Einstein-Hilbert And Gauss-Bonnet Metric-Affine, **Lagrangians Jiménez**

Posters Compact Scalar Objects In Ricci-Based Modified Gravity Theories, **Afonso**

Posters Degrees Of Freedom And Hamiltonian Formalism For F(T) Gravity, **Ferraro**

Posters Tachyonic Scalar Fields And Black Hole Geometry, **Deshamukhya**

Posters Radion Stabilization In Higher Curvature Warped Spacetime, **Sengupta**

Posters Projective Invariance In F(T) Gravity, **Bejarano**

Posters Curvature-Matter Coupling And Anisotropic Strange Stars, **Sharif**

Posters A General Correspondence Between Ricci Based Theories And General Relativity, **Orazi**

17.15-17.30 Experimental Relativity With Observations Of The Accretion Disk Continuum Spectrum **Cardenas-Avendano, Alejandro**

17.30-17.45 Axial Quasi-Normal Modes Of Neutron Stars In Massive Scalar-Tensor Theory **Altaha Motahar, Zahra**

17.45-18.00 Neutron Stars In Quadratic $F(R)$ Theories Of Gravity **Jimenez Forteza, Xisco**

18.00-18.15 Gravitational Radiation From Binary Neutron Stars In A Fourth Order Gravity Model **Bera, Sayantani**

18.15-18.30 Distinguishing Between General Relativity And Modified Theories Of Gravity Using Quasi-Normal Modes **Bhattacharyya, Soham**

B2: Numerical relativity

Room 1

17:00-17:15 The Weak Null Condition In Free-Evolution: Dual Foliation Ghg With Constraint Damping, **Edgar Gasperin**

17:15-17:30 The Interior Of A Binary Black-Hole Merger, **Daniel Pook-Kolb**

17:30-17:45 Quick Bbh Merger Visualizations: Interpolating Numerical Apparent Horizons, **Akshay Khadse**

17:45-18:00 Numerical Studies Of Superradiant Instability In Kerr-Ads, **Lorenzo Rossi**

C2: Gravitational waves: Searches, data analysis, parameter estimation and multi-messenger astronomy

Auditorium 3B

17:00-17:15 Observational Black Hole Spectroscopy: A Time-Domain Multimode Analysis Of GW150914, **Carullo, Gregorio**

17:15-17:30 All-Sky Search For Continuous Gravitational Waves From Boson Clouds Around Stellar Mass Black Holes, **Palomba, C**

17:30-17:45 Reanalysis Of Black Hole Echoes, **Tanaka, Takahiro**

17:45-18:00 Search Methods For Ultralight Scalar Field Dark Matter With Gravitational-Wave Detectors And Its Detectability, **Morisaki, S**

18:00–18:15 Measurement Of Sub-Dominant Harmonic Modes For Gravitational Wave Emission From A Population Of Binary Black Holes, **Klimenko, S.**

18:15–18:30 More On The Tests Of Gravity Using Gravitational-Waves Data, **Yamada, Kei**

18:30–18:45 The Optimal Filter For Testing General Relativity With Gravitational Waves, **Capano, Collin**

18:45–19:00 Search For Gravitational-Wave Signals Produced By Cosmic Strings In The Advanced Ligo-Virgo Data, **Belahcene, Imène**

C6: Gravitational waves: Relativity and fundamental physics

Room 2

17:00–17:15 Parametrized Black Hole Quasinormal Ringdown, **Berti, Emanuele**

17:15–17:30 Generalized No-Hair Theorem For Ultracompact Alternatives To Black Holes, **Barceló, C.**

17:30–17:45 Black Hole Ringdown: The Importance Of Overtones, **Giesler, Matthew**

17:45–18:00 Black Hole Spectroscopy With Overtones, **Isi, Maximiliano**

18:00–18:15 Detectability Of The Second Mode In Binary Black Hole Ringdown, **Bhagwat, Swetha**

18:15–18:30 A Study On Quasinormal Modes In Gravitational Wave Signals, **Keivani, Azadeh**

D4: Quantum fields in curved space-time, semiclassical gravity, quantum gravity phenomenology, and theoretical aspects of analogue gravity

Room 8

17:00–17:15 Quantum Effects In Gravitational Collapse And Black Hole Evaporation, **Sebastian Murk**

17:15-17:30 Energy-Momentum Tensor And Metric Near The Schwarzschild Sphere,
Sebastian Murk

17:30-17:45 A Self-Consistent Description Of Time Evolution Of Black Holes Including
Collapsing Matter And Hawking Radiation, **Yuki Yokokura**

17:45-18:00 Particle Creation In Gravitational Collapse To A Horizonless Compact
Object, **Tomohiro Harada**

18:00-18:15 Semiclassical Gravity Effects Near Horizon Formation, **Valentin Boyanov**

18:15-18:30 Correlation And The Black Hole Information Loss Paradox, **Qingyu Cai**

18:30-18:45 Volume Inside Old Black Hole, Or How To Store Our Universe Inside A Ping
Pong Ball, **Tommaso De Lorenzo**

Friday

Auditorium 1

9:00-9:50 Loop quantum gravity: basics and some recent advances, **Abhay Ashtekar.**

9:50-10:40 Particle Physics Beyond Colliders, **Asimina Arvanitaki.**

10:40-11:10 **Coffee Break**

11:10-12:00 Imaging the event horizon in the Galactic center and M87, **Heino Falcke.**

12:00-12:50 From LISA Pathfinder to LISA: preparing for gravitational wave observation from
space, **William Joseph Weber.**

12:50-14:30 **Lunch Break**

Parallel Sessions Before Coffee Break

A2: Mathematical relativity and classical gravitation

Auditorium 3A

14:30–14:45 Asymptotic Behavior Of Massless Fields And The Memory Effect, **Satishchandran, Gautam**

14:45–15:00 (A)Ds In Bondi Gauge, **Poole, Aaron**

15:00–15:15 The Hyperbolic Einstein–Rosen Bridge, **Beltrán–Palau, Pau**

15:15–15:30 Boson Clouds Around Rotating Black Holes: Obstacles In Generalizing The No–Hair Theorems, **Salgado, Marcelo**

15:30–15:45 Trajectory Of Light Ray Due To A Charged Body Via Optical Medium Approach, **Roy, Saswati**

15:45–16:00 Isolated Horizons And The Petrov Type D Equation, **Dobkowski–Rylko, Denis**

16:00–16:15 Conserved Charges In Asymptotically De Sitter Spacetimes, **Hoque, Sk Jahanur**

16:15–16:30 Some Results On Black Hole Horizons: A Covariant Approach, **Abbas Sherif**

B3: Approximations, perturbation theory, and their applications

Room 3

14:30–15:00 Uv And Ir Divergencies In The Post–Newtonian Expansion, **Stefano Foffa**

15:00–15:15 Two Body Dynamics In The Post–Newtonian Approximation Beyond Fourth Perturbative Order, **Riccardo Sturani**

15:15–15:30 GW Generation At The 4th Post–Newtonian Order, **François Larrouturou**

15:30–15:45 Tidal Effects Up To Second Post–Newtonian Order In Inspiralling Binary Neutron–Star Systems, **Quentin Henry**

15:45–16:00 The Impact Of Approximations And Uncertainties On Binary Black Hole Waveform Models, **Mark Hannam**

16:00–16:15 Towards A New Multipolar Description Of Gravitational Waves From Binary Black Holes, **Lionel London**

16:15–16:30 Recent Progress In Teobresums, **Sarp Akcay**

C1: Pulsar Timing Arrays

Room 4

15:00–15:15 Status of the North American nanohertz observatory for gravitational waves, **Timothy Pennucci**

15:15–15:30 IPTA data release 2: Preliminary limits on a stochastic background of GWs from SMBH binaries, **Paul Baker**

15:30–15:45 Realistic sensitivity curves for pulsar timing arrays, **Jeffrey Hazboun**

15:45–16:00 Constraining galaxy and black hole binary mergers with pulsars, **Siyuan Chen**

16:00–16:15 The MeerTime key science project on pulsar timing, **Matthew Bailes**

16:15–16:30 Prospects for gravitational wave astronomy with next generation large-scale pulsar timing arrays, **Yan Wang**

C2: Gravitational waves: Searches, data analysis, parameter estimation and multi-messenger astronomy

Auditorium 1

14:30–14:45 Results Of The Recent Search For An Isotropic Stochastic Background Using Advanced LIGO Data, **Whiting, B. F.**

14:45–15:00 Anisotropies In The Stochastic Gravitational-Wave Background, **Sakellariadou, M**

- 15:00-15:15 Searching For The Stochastic Gravitational Wave Background With Advanced LIGO And Advanced Virgo, **Mandic, Vuk**
- 15:15-15:30 Gravitational Waves From Core-Collapse Supernovae, **Andresen, Haakon**
- 15:30-15:45 Towards Asteroseismology Of Core-Collapse Supernovae With Gravitational Wave Observations, **Cerdá-Durán, P.**
- 15:45-16:00 Universal Relations Of Core-Collapse Supernova With Gravitational Waves, **Torres-Forné, A**
- 16:00-16:15 Detecting And Reconstructing Unmodeled Gravitational Waves With The Bayeswave Algorithm, **Millhouse, M.**
- 16:15-16:30 Searching For Long-Duration Gravitational Wave Transients From Glitching Pulsars, **Keitel, David**

C5: LISA and other Space Based Detectors

Room 1

- 14:30-14:45 Photodetection In LISA, **Fernandez Barranco, G**
- 14:45-15:00 Analysis Of Tianqin Science Objectives, **Wang, Hai-Tian**
- 15:00-15:15 Detecting Bodies Orbiting The Galactic Center Black Hole Sgr A* With LISA, **Gourgoulhon, E.**
- 15:15-15:30 Magnetic Experiments On-Board Lisapathfinder, **López-Zaragoza, J P**
- 15:30-15:45 LISA Laser System Design, Strategy And Verification, **L. Mondin**
- 15:45-16:00 Towards Multimessenger Astronomy In The LISA Era, **Marka, Zsuzsa**

C6: Gravitational waves: Relativity and fundamental physics

Auditorium 3B

- 14:30-14:45 Testing Gravity At Cosmological Distance With Gravitational-Wave Propagation, **Nishizawa, Atsushi**

14:45-15:00 Model-Agnostic Test On Gravitational-Wave Polarizations, **Pang, P. T. H.**

15:00-15:15 Fate Of Extra Dimensions In Light Of GW170817, **Chakraborty, S.**

15:15-15:30 The Stochastic Gravitational-Wave Background In The Absence Of Horizons, **Brito, Richard**

15:30-15:45 Axion Cloud Around Supermassive Black Holes And Its Astrophysical Implications, **Yang, Huan**

15:45-16:00 Gravitational Waves Of Triple System In Einstein-Aether Theory, **Wang, Anzhong**

16:00-16:15 Continuous Gravitational Waves From Magnetized White Dwarfs And Neutron Stars: Missions For LISA, Decigo, Bbo, Mukhopadhyay, **Banibrata**

16:15-16:30 Non-Local Stars As Blackhole Mimickers, **Mazumdar, Anupam**

C7: Multi-Messenger Astronomy of Gravitational Wave Sources

Room 2

14:30-15:00 The Observational Prospects For GW Em Follow-Up And Engrave, **Susanna Vergani**

15:00-15:15 The Italian Follow-Up Observations Of GW Triggers In The Multi-Messenger Era, **Silvia Piranomonte**

15:15-15:30 The Toros Collaboration Optical Follow-Up Of Gravitational Wave Transients, **Mario Claudio Diaz**

15:30-15:45 Host Galaxies Of Merging Compact Objects, **María Celeste Artale**

15:45-16:00 Magnetically Driven Explosions And Black Hole Formation In Stellar Core Collapse, **Martin Obergaulinger**

16:00-16:15 Birth, Life And Death Of Black Hole Binaries In Galactic Nuclei, **Manuel Arca Sedda**

16:15-16:30 Astrophysical Signal Of Primordial Black Hole Explosions, **Francesca Vidotto**

C10: Measurements of G

Room 5

14:30-14:45 Gravimetry on the milliscale - 100mg as a source mass, **Tobias Westphal**

14:45-15:15 Precision Measurement Of The Gravitational Constant G With Two Independent Methods **Jun Luo**

15:15-15:30 The Measurement Of Big G - A Historical Overview, **Christian Rothleitner**

15:30-15:45 Update On The Work At Nist On The Determination Of Newton'S Constant, G, Using The Bipm 2013 Apparatus, **Clive Speake**

15:45-16:00 Moiré Neutron Interferometer For Precision Measurement Of G, **Dusan Sarenac**

16:00-16:15 Towards A Better Determination Of Big G, **Muchuan Hua**

16:15-16:30 Speed as the source of the gravitation field, **Julio Pérez**

D2: Gravitational aspects of String Theory

Room 6

14:30-15:00 Cosmic censorship violation in black hole collisions in higher dimensions, **Roberto Emparan**

15:00-15:15 Negative Energies in String Theory: Limitations and effects on traversable wormholes, **Donald Marolf**

15:15-15:30 Constraints on 4 graviton scattering, **Shiraz Minwalla**

15:30-15:45 Novel supersymmetric black holes in ADS, **Jorge Santos**

15:45-16:00 Merging horizons at Large D, **Ryotaku Suzuki**

16:00-16:15 Black holes as black blobs on a black membrane, **David Licht**

16:15-16:30 Holographic fermions in striped phases, **Li, Li**

D3: Causal sets, causal dynamical triangulations, non-commutative geometry, asymptotic safety, and other approaches to quantum gravity

Room 7

14:30–15:00 A status report on Causal Set Theory, **Sumati Surya**

15:00–15:15 Studies on the SJ vacuum in de Sitter spacetime, **Nomaan X**

15:15–15:30 Some features of the Hamiltonian analysis of Asymptotic Safe Quantum Gravity, **Gabriele Gionti S.J.**

15:30–15:45 Causal dynamical triangulations on a torus, **Jakub Gizbert-Studnicki**

15:45–16:00 Geometric flux formula for the gravitational Wilson loop, **M.C.A. Reitz**

16:00–16:15 State space renormalization in 1+1 CDT, **Susanne Lanery**

D4: Quantum fields in curved space-time, semiclassical gravity, quantum gravity phenomenology, and theoretical aspects of analogue gravity

Room 8

14:30–14:45 Scattering Of Co-Current Surface Waves On An Analogue Black Hole, **Scott Robertson**

14:45–15:00 Effective Self-Consistent Solutions From Asymptotically Safe Gravity, **Alessia Platania**

15:00–15:15 Small Scale Structure Of Spacetime And It'S Ramifications, **Dawood Kothawala**

15:15–15:30 Unitarity And Information In Quantum Gravity: A Simple Example, **Lautaro Amadei**

15:30–15:45 Searching For A Fundamental Equation For Quantum Gravity, **Tatyana Shestakova**

15:45–16:00 An Optical Analogue Of Gravity-Induced Instabilities, **Caio Ribeiro**

16:00–16:15 Traces Of The Unruh Effect In Surface Waves, **Joao Paulo Cardoso Ramos Rodrigues**

16:15–16:30 Proposal For Observing The Unruh Effect Using Classical Electrodynamics, **Gabriel Cozzella**

Parallel Sessions After Coffee Break

B3: Approximations, perturbation theory, and their applications

Room 3

17:00–17:30 The Eccentric Behavior Of Inspiring Compact Binaries, **Nicholas Loutrel**

17:30–17:45 A Gravitational Wave Model For Non-Spinning Binaries With Moderate Eccentricity, **Nicolas Yunes**

17:45–18:00 Theory-Agnostic Modeling Of Dynamical Scalarization In Binary Systems, **Mohammed Khalil**

18:00–18:15 Enhancing Gravitational Waveform Models, **Yoshinta Eka Setyawati**

18:15–18:30 Rotational Instabilities Of Neutron Stars, **Kostas Kokkotas**

C1: Pulsar Timing Arrays

Room 4

17:00–17:15 Impact of planetary ephemerides on gravitational wave searches with pulsar timing arrays, **Aurelien Chalumeau**

17:15–17:30 The Geometry of the PTA Ephemeris Error Problem, **Elinore Roebber**

17:30–17:45 Model selection for spin noise in pulsar timing arrays, **Boris Goncharov**

17:45–18:00 Testing theories of gravity with relativistic binary pulsars, **Vivek Venkatraman Krishnan**

18:00–18:15 Testing anisotropic spacetimes with an array of pulsars, **Lijing Shao**

18:15–18:30 PPTA constraints on fuzzy dark matter, **Nataliya Porayko**

18:30–18:45 Cosmological sources, **Xavier Siemens**

18:45–19:00 Sensitivity of Pulsar Timing Arrays towards Polarizations of Gravitational Waves, **Adrian Boitier**

C2: Gravitational waves: Searches, data analysis, parameter estimation and multi-messenger astronomy

Auditorium 1

17:00–17:15 Search For Gravitational Waves With Short Time Duration In The Advanced LIGO And Virgo, **Drago, M**

17:15–17:30 Full Coherent Searches For Continuous Gravitational Waves With The LIGO Second Observing Run, **Mastrogiovanni, S.**

17:30–17:45 Loosely Coherent Searches For Continuous Waves, **Dergachev, Vladimir**

17:45–18:00 A Directed Search Of Continuous Wave Signals From The Galactic Center In Advanced LIGO'S Second Observing Run, **Piccinni, O. J.**

18:00–18:15 Directional Model-Independent Search For Persistent Gravitational Waves In Advanced LIGO'S Data From The First Two Observing Runs, **Goncharov, B**

18:15–18:30 LIGO-Virgo Searches For Gravitational Waves From Scorpius X-1, **Whelan, John T.**

18:30–18:45 Einstein@Home Search For Continuous Gravitational Waves From Vela Jr, Cassiopeia A And G347.3, **Ming, J.**

18:45–19:00 All-Sky Search For Continuous Gravitational Waves From Isolated Neutron Stars Using Advanced LIGO O2 Data, **Covas, Pep**

C5: LISA and other Space Based Detectors

Room 1

17:00–17:15 Binary White Dwarfs As Laboratories For Extreme Gravity With LISA,
Littenberg, Tyson B.

17:15–17:30 Extreme–Mass–Ratio Inspirals Produced By Tidal Capture Of Binary Black
Holes, **Chen, X.**

17:30–17:45 Proposed LISA Telescope Design, **Livas, J.**

17:45–18:00 Investigating An Optimal Backlink Candidate for LISA, **L. Bischof**

18:00–18:15 Space–Based Gravitational Wave Detector Simulation Architecture For
Noise Coupling Analysis And System Optimization—Current Status And Future
Development, **Zhang Y.Z.**

18:15–18:30 Prospects For Identifying Near–Extremal Black Holes Using LISA, **Burke, O**

C6: Gravitational waves: Relativity and fundamental physics

Auditorium 3B

17:00–17:15 Testing The Area Quantisation Hypothesis From Black Hole Ringdown
Signals, **Danny Laghi**

17:15–17:30 Instability Of Exotic Compact Objects And Its Implications For
Gravitational–Wave Echoes, **Chen, Baoyi**

17:30–17:45 Tails And Tails Of Tails: Probing Event Horizon Via Gravitational Waves,
Abedi, Jahed

17:45–18:00 Exotic Compact Objects: Ergoregion Instability, Ringdown And Echoes,
Maggio, Elisa

18:00–18:15 Gravitational Echoes From Exotic Compact Objects, **Addazi, Andrea**

18:15–18:30 Anisotropic Stars As Ultracompact Objects In General Relativity, **Raposo, G.**

C7: Multi-Messenger Astronomy of Gravitational Wave Sources

Room 2

17:00-17:15 The Transient High-Energy Sky And Early Universe Surveyor (Theseus),

Lorenzo Amati

17:15-17:30 The Key-Role Of Theseus For Multi-Messenger Astrophysics, **Giulia Stratta**

17:30-17:45 Multi-Messenger Astronomy With Lisa And Athena, **Paul Mcnamara**

17:45-18:00 Detectability Of Modulated X-Rays From Lisa'S Supermassive Black Hole Mergers, **Tito Dal Canton**

18:00-18:15 Investigating The Variability Of Accreting Binary Black Holes, **Scott Noble**

18:15-18:30 Gravitational Wave Emission By Common-Envelope Evolution Of Binary Stars, **Yonadav Barry Ginat**

D2: Gravitational aspects of String Theory

Room 6

17:00-17:30 Holographic thermodynamics of accelerating black holes, **David, Kubiznak**

17:30-17:45 Holographic phase transitions, **Thanasis Giannakopoulos**

17:45-18:00 Emergent Dark Universe and the Swampland Criteria, **Yun-Long Zhang**

18:00-18:15 Supersymmetric rotating black holes in gauged supergravity and string theory, **Alejandro Ruipérez**

18:15-18:30 Quantum Corrected Black Holes from String T-Duality, **Michael Wondrak**

18:30-18:32 Posters **Xu Xiao-Bao**, Entanglement Entropy in JT CFT_2

18:32-18:34 Posters **Mo Jie-Xiong**, Effects of Lovelock gravity on the Joule-Thomson expansion

D3: Causal sets, causal dynamical triangulations, non-commutative geometry, asymptotic safety, and other approaches to quantum gravity

Room 7

17:00-17:15 Hopf-algebraic deformations of 3D spacetime symmetries, **Tomasz Trzesniewski**

17:15-17:30 Proposal for a new quantum theory of gravity, **Tejinder Singh**

17:30-17:45 The case for emergent gravity, **Joshua Erlich**

17:45-17:47 Poster Jan Novak: Breaking nonlinear graviton with plabic graphs

D4: Quantum fields in curved space-time, semiclassical gravity, quantum gravity phenomenology, and theoretical aspects of analogue gravity

Room 8

17:00-17:15 Subtleties Of Different Approaches To Electromagnetic Analogue Space-Times, **Sebastian Schuster**

17:15-17:30 Experimental Evidence For Radiation Reaction Thermalized At The Fulling-Davies-Unruh Temperature, **Morgan Lynch**

17:30-17:45 Rindler Quench In Curved Spacetime And In The Laboratory, **Jorma Louko**

17:45-18:00 Rogue Waves In Selfgravitating Bec, **Sandro Gödtel**

18:00-18:15 Pair Creation Induced By Electric And Gravitational Fields, **Silvia Pla García**

18:15-18:30 Adiabatic Invariance In The Creation Of Particles By Gravitational And Electromagnetic Fields, **Pau Beltrán-Palau**

18:30-18:45 Handedness Of Photons And Gravitational Wave Polarization, **Adrián Del Río Vega**