

**SCIENTIFIC PROGRAM of NEB-19 Conference RECENT DEVELOPMENTS IN GRAVITY**

Time zone: Athens (UTC+3, EEST summer time)

**Zoom links:** [1. ALL sessions EXCEPT Parallel Session A:](https://authgr.zoom.us/j/93583224457?pwd=QXpwWnB0dkJuc1NzbSsvUGthOUe4dz09) <https://authgr.zoom.us/j/93583224457?pwd=QXpwWnB0dkJuc1NzbSsvUGthOUe4dz09>  
[2. Parallel Session A:](https://authgr.zoom.us/j/98904154991?pwd=Z1FFa3JyK1ZzS0Y1aE1CVTA4dkVtQT09) <https://authgr.zoom.us/j/98904154991?pwd=Z1FFa3JyK1ZzS0Y1aE1CVTA4dkVtQT09>

**Monday 20/9/2021**

		<b>Title / link to abstract</b>
09:45-10:00	<b>Welcome</b>	
10:00-10:45	S. Katsanevas	<a href="#">Gravitational Wave Detectors, present and future, an introduction</a>
10:45-11:15	M. Agathos	<a href="#">Tests of GR with Gravitational Wave Detections</a>
11:15-11:45	N. Karnesis	<a href="#">Detecting Gravitational Waves with LISA: Searching and extracting signals in the data</a>
11:45-12:15	<b>Break</b>	
	<b>PARALLEL SESSION A</b>	
12:15-12:35	I. Timogiannis	<a href="#">Comparing Spin Supplementary Conditions for Circular Equatorial Orbits</a>
12:35-12:55	L. Polcar	<a href="#">Computing EMRI using canonical perturbation theory</a>
12:55-13:15	K. Zloshchastiev	<a href="#">Logarithmic superfluid vacuum and its manifestations through gravitational and cosmological phenomena</a>
	<b>PARALLEL SESSION B</b>	
12:15-12:35	P. Iosif	<a href="#">Investigation of binary neutron star merger remnants with equilibrium models</a>
12:35-12:55	P. Pnigouras	<a href="#">Inferring the dense nuclear matter equation of state with neutron star tides</a>
12:55-13:15	H. Sotani	<a href="#">Gravitational wave asteroseismology in protoneutron stars</a>
	<b>Break</b>	
	<b>PARALLEL SESSION A</b>	
15:30-15:50	A. Lehebel	<a href="#">Astrophysical constraints on compact objects in 4D Einstein-Gauss-Bonnet gravity</a>
15:50-16:10	T. Helfer	<a href="#">Cosmic String Loop Collapse in full general relativity</a>
16:10-16:30	A. Bakopoulos	<a href="#">Wormhole solutions in beyond Horndeski theories</a>
	<b>PARALLEL SESSION B</b>	
15:30-15:50	A. Nathanaïl	<a href="#">How to do Cosmology with gravitational waves and afterglow observations from neutron star mergers</a>
15:50-16:10	G. Lioutas	<a href="#">Frequency deviations in neutron star universal relations: Additional equation of state</a>
16:10-16:30	V. Nousi	<a href="#">Autoencoder-driven Spiral Representation Learning for Gravitational Wave Surrogat</a>
	<b>Break</b>	
16:30-17:00	Ch. Markakis	<a href="#">Time-symmetric integration and discontinuous collocation methods for self-force applications</a>
17:00-17:30	E. Berti	<a href="#">Gravitational-wave astronomy: what's next?</a>
17:30-18:15	M. Sakellariadou	<a href="#">Hunting for the gravitational-wave background: implications for astrophysics, high energy physics, and theories of gravity</a>
18:15-19:00		
20:00-21:30	<a href="#">Documentary: LIGO a Film by Les Guthman:</a>	<a href="#">Watch at this link on Vimeo!</a>

**Tuesday 21/9/2021**

		<b>Title / link to abstract</b>
10:00-10:45	T. Sotiriou	<a href="#">Black hole hair: from no-hair theorems to scalarization</a>
10:45-11:15	C. Skordis	<a href="#">Solving the dark matter problem with new gravitational degrees of freedom</a>
11:15-11:45	E. Barausse	<a href="#">(Absence of) screening in gravitational-wave generation</a>
11:45-12:15	<b>Break</b>	
	<b>PARALLEL SESSION A</b>	
12:15-12:35	P. Christodoulidis	<a href="#">Multi-field cosmology</a>
12:35-12:55	G. Antoniou	<a href="#">Spontaneous scalarization of compact objects with Ricci and Gauss-Bonnet couplings</a>
12:55-13:15	Th. Nakas	<a href="#">Localized and analytic braneworld black-hole solutions</a>
	<b>PARALLEL SESSION B</b>	
12:15-12:35	M. Kerachian	<a href="#">Model agnostic approaches to cosmology</a>
12:35-12:55	Marcus Högåås	<a href="#">Constraints on bimetric gravity</a>
12:55-13:15	G. Lukes-Gerakopoulos	<a href="#">Impact of Resonances and Chaos on Gravitational Waves from Extreme Mass Ratio Inspirals</a>
	<b>Break</b>	
	<b>PARALLEL SESSION A</b>	
15:30-15:50	E. Gumrukcuoglu	<a href="#">A new class of massive spin-2 theories with stable cosmologies</a>
15:50-16:10	K. Tzanni	<a href="#">Acceptable cosmologies with wave maps</a>
16:10-16:30	A. Lympersis	<a href="#">Modified cosmological scenarios through extended horizon entropies</a>
	<b>PARALLEL SESSION B</b>	
15:30-15:50	M. Petronikolou	<a href="#">Alleviating H0 tension in generalized Galileon theories</a>
15:50-16:10	O. Minazzoli	<a href="#">Black holes and neutron stars in entangled relativity</a>
16:10-16:30	A. Tokareva	<a href="#">Positivity bounds with gravity in 4 dimensions</a>
	<b>Break</b>	
16:30-17:00	D. Doneva	<a href="#">Astrophysical tests of hairy black holes</a>
17:00-17:30	D. Psaltis	<a href="#">Tests of General Relativity with Black Hole Shadows</a>
17:30-18:15	A. Starobinsky	<a href="#">The mixed <math>R^2</math> - Higgs model during and after inflation</a>
18:15-19:00		

**Wednesday 22/9/2021**

		Title / link to abstract
10:00-10:45	E. Plienis	(cancelled)
10:45-11:15	S. Basilakos	<a href="#">Modified gravity and Cosmology</a>
11:15-11:45	E. Papantonopoulos	<a href="#">Study of the stability of compact objects in scalar-tensor theories of gravity</a>
11:45-12:15	<b>Break</b>	
	<b>PARALLEL SESSION A</b>	
12:15-12:35	N. Dimakis	<a href="#">Conserved charges from distorted conformal Killing vectors in pp-waves</a>
12:35-12:55	E. Melas	<a href="#">On the representation theory of the BMS group and its variants in three space-time dimensions</a>
12:55-13:15	M. Mylova	<a href="#">Chiral primordial gravitational waves in extended theories of Scalar-Tensor gravity</a>
	<b>PARALLEL SESSION B</b>	
12:15-12:35	A. Paliathanasis	<a href="#">Quantum potentiality in silent universes</a>
12:35-12:55	N. Van den Bergh	<a href="#">Robinson-Trautman Einstein-Maxwell fields of Petrov type D</a>
12:55-13:15	D. Papadopoulos	<a href="#">On the stability of rotating spherical fluid shells</a>
	<b>Break</b>	
15:30-16:15	S. Weinfurter	<a href="#">Out-of-equilibrium hydrodynamic rotating black holes</a>
16:15-17:00	K. Kokkotas	<a href="#">Neutron Stars in the Era of Gravitational Wave Astronomy</a>
17:00-17:30	<b>Break</b>	
17:30-18:00	S. Yazadjiev	<a href="#">New fully nonlinear dynamical mechanism for formation of scalarized black holes</a>
18:00-18:10	<b>Break</b>	
	<b>PARALLEL SESSION A</b>	
18:10-18:30	E.-A. Kontou	<a href="#">A singularity theorem for evaporating black holes</a>
18:30-18:50	D. Kubiznak	<a href="#">The rise and fall of the black hole chemistry</a>
18:50-19:10	C. Alexander	<a href="#">Cosmic Acceleration Induced by Friedmann-Static Shock Waves</a>
	<b>PARALLEL SESSION B</b>	
18:10-18:30	M. Astorino	<a href="#">Multi black hole system at equilibrium in an external gravitational field</a>
18:30-18:50	M. O'Boyle	<a href="#">A Parametrized Equation of State for Neutron Star Matter with Continuous Sound Speed</a>
18:50-19:10	B. Cuadros-Melgar	<a href="#">Late time tails and thermodynamics of dirty black holes</a>

**Thursday 23/9/2021 (Xanthopoulos Day)**

		Title / link to abstract
10:00-10:40	V. Pavlidou	The digitized archive of Basilis Xanthopoulos' work
10:40-11:15	K. Kokkotas, D. Papadopoulos	An overview of Basilis Xanthopoulos' research
11:15-11:30	<b>Break</b>	
11:30-12:15	R. Gregory	<a href="#">Acceleration in 3 dimensions - a new perspective</a>
12:15-12:45	E. Babichev	<a href="#">Disformed Kerr metric</a>
12:45-13:15	Th. Christodoulakis	<a href="#">Automorphism in Bianchi Type Cosmologies</a>
	<b>Break</b>	
15:45-16:15	L. Glaser	<a href="#">Ising Spins and Causal Sets</a>
16:15-16:45	Th. Apostolatos	<a href="#">Could the self-force enhance the plateau effect in resonance crossing?</a>
16:45-17:30	E.ourgoulhon	<a href="#">Differential geometry with SageMath and applications to gravity</a>
17:30-17:45	<b>Break</b>	
17:45-18:15	V. Faraoni	<a href="#">A new approach to the thermodynamics of scalar-tensor gravity</a>
18:15-19:00	M. Dafermos	<a href="#">The Nonlinear Stability of Black Holes</a>

**Legend:**

Plenary talks	
Invited Keynote talks	
Contributed talks (session A)	Contributed talks (session B)
Talks dedicated to the occasion of 70 years from the birth of Basilis Xanthopoulos	

**Zoom links:** [1. ALL sessions EXCEPT Parallel Session A:](https://authgr.zoom.us/j/93583224457?pwd=QXpwWnB0dKJuc1NzbSsvUGthOUe4dz09) <https://authgr.zoom.us/j/93583224457?pwd=QXpwWnB0dKJuc1NzbSsvUGthOUe4dz09>

[2. Parallel Session A:](https://authgr.zoom.us/j/98904154991?pwd=Z1Ffa3JyK1ZzS0Y1aE1CVTA4dkVtQT09) <https://authgr.zoom.us/j/98904154991?pwd=Z1Ffa3JyK1ZzS0Y1aE1CVTA4dkVtQT09>