

Session Program

30 March 2020 to 3 April 2020



PHAROS Conference 2020: The multi-messenger physics and astrophysics of neutron stars

Parallel 2B

Porto Rio Hotel, Patras, Greece, Room 1, 2

Monday 30 March

14:30

Parallel 2B

Session | **Location:** Room 2

14:30–14:45

Magnetorotational instability in protoneutron stars: the regime of high magnetic Prandtl numbers

Speaker

Jerome Guilet

14:45–15:00

A global model of the magnetorotational instability in proto-neutron stars

Speaker

Reboul-Salze Alexis

15:00–15:15

Magnetar formation through convective dynamo in protoneutron stars

Speaker

Dr Raphaël Raynaud

15:15–15:30

Thermal spots and light curves of magnetars: 3D MHD simulations

Speaker

Andrei Igoshev

15:30–15:45

X-ray emission from magnetized rotation-powered pulsars

Speaker

Dr Michela Rigoselli

15:45–16:00

Magnetic field instabilities in neutron stars

Speaker

Mr Ankan Sur

16:00

Tuesday 31 March

14:30

Parallel 2B

Session | **Location:** Room 2

14:30–14:45

Partially accreted crusts of neutron stars

Speaker

Lami Suleiman

14:45–15:00

Thermodynamically consistent equation of state for an accreted crust

Speaker

Mikhail Gusakov

15:00–15:15

The crust of accreting neutron stars within simplified reaction network

Speaker

Mr Nikolay Shchepochin

15:15–15:30

Carbon burning in the envelopes of neo-neutron stars

Speaker

Dr Mikhail Beznogov

15:30–15:45

Super-Massive Neutron Stars and Compact Binary Millisecond Pulsars

Speaker

Dr Manuel Linares

15:45–16:00

Accretion-induced collapse to third family compact stars as trigger for eccentric orbits of millisecond pulsars in binaries

Speaker

David Edwin Alvarez Castillo

16:00

Wednesday 1 April

14:30

Parallel 2B

Session | **Location:** Room 2

14:30–14:45

Distinguishing double neutron star from neutron star-black hole binaries with gravitational wave observations

Speaker

Margherita Fasano

14:45–15:00

BSN mergers with microscopic equations of state

Speaker

Antonio Figura

15:00–15:15

Using a realistic equation of state in neutron star post-merger simulations.

Speaker

Danat Issa

15:15–15:30

Probing binary neutron star merger components and remnant using isentropic equations of state

Speaker

Prof. Debades Bandyopadhyay

15:30–15:45

Post-Merger Magnetic Field Geometries and their Effect on Long-Term Afterglows

Speaker

Mr Aretaios Lalakos

15:45–16:00

The contribution of r-process heating on the dynamics of ejecta in binary neutron star mergers

Speaker

Dr Federico Guercilena

16:00

Thursday 2 April

14:30

Parallel 2B

Session | **Location:** Room 2

14:30–14:45

High Performance Computing in High-energy Astrophysics: the case of the Pulsating Ultra Luminous X-ray sources (PULXs)

Speaker

Guillermo Andres Rodriguez Castillo

14:45–15:00

A FAST study of the slowest pulsar

Speaker

Mr Crispin Agar

15:00–15:15

A resistive extension for GRMHD

Speaker

Mr Alex Wright

15:15–15:30

Spritz: a new fully general relativistic magnetohydrodynamics code

Speaker

Jay Vijay Kalinani

15:30–15:45

Gravitational dynamics of relativistic binary pulsar systems

Speaker

Dr Vivek Venkatraman Krishnan

15:45–16:00

General-relativistic corrections to pulsar radio and high-energy emission

Speaker

Quentin Giraud

16:00