

# **NEW TRENDS IN PHYSICS - FROM GRAVITATIONAL WAVES TO DARK MATTER**

**Paris 28.11-29.11.2019.**

## **THURSDAY 28.11.19**

- 9.10-10.00** Jerzy Lewandowski (Uniwersytet Warszawski)- Equations of non-expanding horizons and the mystery of black hole uniqueness
- 10.00-10.50** Karl Landsteiner (Universidad Autonoma de Madrid)- Far from equilibrium anomalous transport in holography
- 10.50-11.10** **Coffee break**
- 11.10-12.00** Andrzej Królak (Narodowe Centrum Badań Jądrowych) – Observations of gravitational waves by Ligo Virgo detectors
- 12.00-12.50** Jerzy Lukierski (Uniwersytet Wrocławski)- From classical to quantum-deformed twistors
- 12.50-14.00** **Lunch break**
- 14.00-14.50** David Langlois (Université Paris Diderot)- Dark energy and modified gravity
- 14.50-15.30** Andrzej Borowiec (Uniwersytet Wrocławski) - Palatini gravity and frame extensions
- 15.30-15.50** **Coffee break**
- 15.50-17.00** Poster session

## **FRIDAY 29.11.19**

- 9.00-9.50** Piotr Surówka (Max Planck Institute, Dresden) – Lessons from chiral elasticity and hydrodynamics
- 9.50-10.30** Patryk Mach (Uniwersytet Jagielloński) – Magnetised and not magnetized self-gravitating tori around black hole
- 10.30-11.10** Adam Balcerzak (Uniwersytet Szczeciński) - Interuniversal entanglement in a cyclic universe
- 11.10-11.30** **Coffee break**
- 11.30- 12.10** Jacek Tafel (Uniwersytet Warszawski) - The Penrose inequality for the perturbed Schwarzschild data
- 12.10-12.50** Vincenzo Salzano (Uniwersytet Szczeciński) -Measuring the speed of light with cosmological observations
- 12.50-14.00** **Lunch break**
- 14.00-14.50** Elias Kiritsis (Université Paris Diderot)- The holographic renormalization group
- 14.50-15.40** Richard Kerner (Sorbonne-Université)– Relativistic epicycles, or new approach to the relativistic two-body problem
- 15.40-16.20** Jerzy Kijowski (Centrum Fizyki Teoretycznej PAN) – New approach to Trautman-Bondi energy: how much energy is carried by gravitational waves
- 16.20** **Cocktail**