# Varying Constants and Fundamental Cosmology – VARCOSMOFUN'16



Monday, 12 September 2016 - Saturday, 17 September 2016 Szczecin, Poland

### **Scientific Programme**

The programme of the conference will contain 5 plenary morning sessions and 3 parallel sessions each afternoon. The last day of the conference (Saturday) will contain a morning session only and will be devoted to philosophical aspects of the variability of physical constants and the frontiers of physics and cosmology.

There will also be a poster session if the number of abstracts will be above our talk time capabilities. The oral presentations will be selected by the session conveners in collaboration with the Organizing Committee.

The topics of the parallel sessions:

#### Varying constants – theory

(Convener: Mikhail Kozlov)

#### **Varying constants – laboratory experiments**

(Convener: Ekkehard Peik)

#### Varying constants – astronomical observations

(Convener: Michael Murphy)

#### **Quantum gravity and cosmology**

(Convener: Mariam Bouhmadi-López)

## Quantum entanglement and many-worlds interpretation

(Convener: Sugumi Kanno)

#### **Multiverse**

(Convener: Salvador Robles-Pérez)

#### **Modifications of gravity**

(Convener: Jose Beltrán Jiménez, David Mota)

#### **Dark matter – theory**

☐ "Inflation, early universe and dark matter" (Conveners: Mark Hindmarsh, Enrico Maria Sessolo)

#### **Dark matter – experiment**

☐ "Observational cosmology and gravitational waves" (Convener: Vincenzo Fabrizio Cardone)

#### Dark energy - theory

(Convener: Shinji Tsujikawa)

#### **Dark energy – observations**

 $\square$  "Observational cosmology and gravitational waves" (Convener: Vincenzo Fabrizio Cardone)

#### Inflation and large-scale structure

☐ "Inflation, early universe and dark matter" (Conveners: Mark Hindmarsh, Enrico Maria Sessolo)

#### **Early universe**

□ "Inflation, early universe and dark matter" (Conveners: Mark Hindmarsh, Enrico Maria Sessolo)

#### **Gravitational waves**

□ "Observational cosmology and gravitational waves" (Convener: Vincenzo Fabrizio Cardone)

#### **Cosmic Microwave Background, B-mode search**

□ "Inflation, early universe and dark matter" (Conveners: Mark Hindmarsh, Enrico Maria Sessolo)

#### **Future challenges and experiments**

□ "Observational cosmology and gravitational waves" (Convener: Vincenzo Fabrizio Cardone)

#### Varying constants and anthropic principles

☐ "Philosophy and cutting edge of physics and cosmology" (Convener: Mariusz P. Dąbrowski)

#### **Cutting-edge of physics and cosmology**

☐ "Philosophy and cutting edge of physics and cosmology" (Convener: Mariusz P. Dąbrowski)