



# Cargèse International Workshop 2020

## Hot Topics in Modern Cosmology : SW 14

May 03 - 09, 2020

Web site

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Hot Topics in  
Modern Cosmology  
Spontaneous Workshop XIII

Aix\*Marseille  
université

Spontaneous Workshop (SW) brings together specialists on recent insights in Particle Physics, Astrophysics and Cosmology. The aim is to stimulate debate on common topics in views of providing us with innovating ideas on emerging problems. The workshop's organization is based on an optimal number of concise presentations and with enough space for discussions in order to favour interactions among participants. Postdocs and PhD students are encouraged to attend.

### Main topics

- ✧ Dark Energy, Inflation, Baryon and Lepton number violation
- ✧ CP violation - LHC and Dark Matter - Astroparticle Physics
- ✧ Neutrino Cosmology - Baryogenesis and Leptogenesis - cosmic Antimatter
- ✧ Gravitational Waves of cosmological and astrophysical origin
- ✧ Primordial black holes as a part of Dark Matter
- ✧ PBH in binary systems and their detection through gravitational radiation
- ✧ Cosmological parameters - Anomalies in CMB - Inhomogeneous Cosmology
- ✧ Cosmological Large Scale Structures - Magnetic Fields in the Universe
- ✧ Non-local UV completion of gravity - QFT in Curved Spacetime - Massive Gravity
- ✧ Numerical Relativity — Black Hole formation — Modified Gravity Inflation and curvature singularities in modified gravity, including its non-local variants

### Scientific Organizing Committee

Zurab Berezhiani (Univ. L'Aquila), Denis Comelli (INFN Ferrara), Alexander Dolgov (NSU, Univ. & INFN Ferrara), Antoine Folacci (Univ. Corse), Roland Triay (CPT Aix Marseille Univ.)

### Scientific Advisory Committee

Cédric Deffayet (IAP Paris), Mario Novello (CBPF/ICRA Rio de Janeiro), Joe Silk (IAP Paris & Univ. Oxford), Alexei Starobinsky (LITP Moscow)

Registration Fees : 240€

Registration deadline : April 20th, 2020

Contact : triay [at] cpt.univ-mrs.fr

Online registration :

[http://www.cpt.univ-mrs.fr/~cosmo/SW\\_2020/index.php?page=registration](http://www.cpt.univ-mrs.fr/~cosmo/SW_2020/index.php?page=registration)

