ΛISA in Greece Workshop

1st LISA In Greece Workshop

23 Feb 2022
8:30-17:00 CET
Online

The Laser Interferometer Space Antenna (LISA) is a space-based Gravitational Wave (GW) observatory mission scheduled for launch in the mid 2030s. LISA is going to probe the lower part of the GW spectrum, aiming to measure signals from a variety of sources. These include Super-Massive and Stellar-mass Black Hole Binaries, ultra-Compact Binaries originating in our galactic neighborhood, Extreme Mass Ratio Inspiral, and possibly a Stochastic GW Background that may originate from cosmological sources. Measuring such signals will have an immense impact on GW physics, Cosmology, and Astrophysics altogether.

Currently, LISA is at the end of the *phase A* stage, where the initial design is being defined and communicated with ESA. This poses a great opportunity for the scientific community and tech industry based in Greece, to actively contribute to the development of this ESA flagship mission, as parts of a consolidated national effort supported by the Hellenic Space Center (HSC). A contribution may come both in the form of instrumentation (flight hardware), as well as data analysis and software, and dedicated Data Centers. This workshop will be focused on discussing these possibilities, and will serve as our first step towards bringing the science and technology driving forces of Greece, into the development of the LISA mission.

Invited Speakers:

O. Jennrich (ESA)
M. Gehler (ESA)
M. Hewitson (LISA Consortium, AEI)
A. Petiteau (LISA Consortium, APC)
P. McNamara (ESA)
S. Bollanos (HASI Vice-President)

Information & Registration at
indico.physics.auth.gr/e/lisa_gr_2022

Introductory remarks/Welcome by:

Dr. A. Staveris-Polykalas, Secretary General of Telecommunications & Posts, Ministry of Digital Governance.
Prof. S. Stylianidis, Vice Rector for Research of AUTh
I.A. Daglis, President of Hellenic Space Center

Organizing Committee:

N. Karnesis (AUTh), G. Pappas (AUTh) , N. Stergioulas (AUTh)

Scheduled talks:

"*Overview of the LISA mission : The science case of LISA*", O. Jennrich (ESA)

"*ESA & the LISA mission*", M. Gehler (ESA)

"*The LISA Instrument*", M. Hewitson (AEI)

"*LISA Data Processing*", A. Petiteau (APC)

"*Activities and Perspectives of the Hellenic Space Industry*", S. Bollanos (HASI Vice-President)

The expected outcome of this workshop will be a white paper that will collect the ideas discussed during the day. This document will serve as a proposal for our next steps of our endeavor of detecting Gravitational Waves in space.