

# ΑΡΙΣΤΟΤΕΛΕΙΟ ΠΑΝΕΠΙΣΤΗΜΙΟ ΘΕΣΣΑΛΟΝΙΚΗΣ ΤΜΗΜΑ ΦΥΣΙΚΗΣ

ΣΕΜΙΝΑΡΙΟ/WEBINAR

ΤΟΜΕΑΣ ΑΣΤΡΟΦΥΣΙΚΗΣ, ΑΣΤΡΟΝΟΜΙΑΣ ΚΑΙ  
ΜΗΧΑΝΙΚΗΣ

Θέμα: **Detecting Gravitational Waves from Space:  
A New Era in Gravitational Wave Astronomy**

Ομιλητής: **Dr. Nikolaos Karnesis**

Ημερομηνία: **Τρίτη 20-04-2021**

Ώρα: 12:00-13:00

Διαδικτυακό σεμινάριο στον σύνδεσμο:

<https://authgr.zoom.us/j/95373151957?pwd=WThNekcxTEdsVWdTNHA0UllnTHBydz09>

*Meeting ID: 953 7315 1957*

*Passcode: 104699*

## Περίληψη:

The first detection of Gravitational Waves brought us to a new era of astronomy. Since then, more events have been recorded from the ground-based detectors, leading to the publication of the first catalogues of Gravitational Wave sources. Now, the community is developing new detectors with the aim of probing sources in the lower part of the Gravitational Wave spectrum. The ESA Laser Interferometer Space Antenna (LISA) is a space-born Gravitational-Wave observatory scheduled to be launched in the early 2030s. LISA is comprised of a constellation of three satellites forming a triangle with sides of 2.5 million kilometres, following a heliocentric orbit. In this talk I will present the LISA mission and its main scientific goals, highlighting their implications to astrophysics and cosmology. Special focus will be given to the key issues that have to be addressed, in order to extract the full science potential from the data.