

**From:** Carmen Fernandez Leon Carmen.FernandezLeon@aei.mpg.de  
**Subject:** [Internal-h] Institute seminar\_Camilo Garcia Cely\_IFIC-CSIC Valencia on October 8.  
**Date:** 26. September 2024 at 14:44  
**To:** internal-h@aei.mpg.de

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Dear Colleagues,

On **Tuesday, October 8, Camilo Garcia Cely** (IFIC-CSIC, Valencia, Spain) will hold an institute seminar on the following topic:

**Title:** "Lessons from axion dark matter for gravitational-wave physic".

**Abstract:** A decade has passed since the groundbreaking detection of gravitational waves, significantly advancing our understanding of the cosmos. While most current research focuses on detecting gravitational waves at frequencies below a few kHz, there is a growing interest in exploring higher-frequency signals, particularly those of cosmological origin. In the first part of my talk, I will explore the background for these signals within the Standard Model, with a focus on the primary source on Earth: the Sun's high-temperature plasma. I will draw a notable connection to solar axions. In the second part, the discussion will turn to experimental approaches for detecting high-frequency gravitational waves, with particular attention to the potential of axion haloscopes as well polarimetry techniques.

The seminar will start at **2:15 pm** in the **seminar room 133 at the Callinstr. 36** and online:

**Zoom Meeting**

<https://mpi-aei.zoom-x.de/j/64483739238?pwd=rUGh0DMtcgRpRbriBiposwaATb0lig.1>

**Meeting ID:** 644 8373 9238

**Passcode:** 275456

Cheers,

Carmen

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