

[GFIF Seminar] Lessons from axion dark matter for gravitational-wave physics



From OSCAR ALBERTO ZAPATA NOREÑA <oalberto.zapata@udea.edu.co>
To <grupogfif@googlegroups.com>, Amalia Betancur Rodríguez <amalia.betancur@eia.edu.co>, David Vanegas Forero <dvanegas@udemedellin.edu.co>, Richard Hamilthon Benavides Palacios <richardbenavides@itm.edu.co>, <johngomez@itm.edu.co>, <atapia@udemedellin.edu.co>, <cmlopeza@unal.edu.co>, Alexander Quintero Velez <aquinte2@unal.edu.co>, Luis Alberto Wills-Toro <lawillst@unal.edu.co>, Camilo Garcia Cely <Camilo.Garcia@ific.uv.es>
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Dear all,
This is to call your attention to next GFIF seminar, where Camilo García-Cely will give the following seminar:

Lessons from axion dark matter for gravitational-wave physics.
Camilo García-Cely (Instituto de Física Corpuscular (IFIC), CSIC-Universidad de Valencia, Spain)

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.

Date: Wednesday 12/03
Time: 16:00
Place: 6-321

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