

The meV Axion Mass Frontier: challenges and opportunities



Report of Contributions

Contribution ID: **1**

Type: **not specified**

Introduction

Monday 27 October 2025 15:00 (30 minutes)

Presenter: LELLA, Alessandro (Istituto Nazionale di Fisica Nucleare)

Session Classification: Session 1

Contribution ID: 2

Type: **not specified**

The meV axion mass frontier: updates from Cosmological Lattice Simulations

Monday 27 October 2025 15:30 (30 minutes)

Presenter: REDONDO, Javier (Universidad de Zaragoza)

Session Classification: Session 1

Contribution ID: 3

Type: **not specified**

Hot Dark Matter and Dark Radiation in future cosmological probes

Monday 27 October 2025 16:00 (30 minutes)

Presenter: D'ERAMO, Francesco (Istituto Nazionale di Fisica Nucleare)

Session Classification: Session 1

Contribution ID: 4

Type: **not specified**

Supernova Axions

Monday 27 October 2025 17:00 (30 minutes)

Presenter: FIORILLO, Damiano (Niels Bohr Institute, Copenhagen)

Session Classification: Session 2

Contribution ID: 5

Type: **not specified**

Cherenkov Detection of Supernova Axions

Monday 27 October 2025 17:30 (30 minutes)

Presenter: GUADAGNOLI, Diego (CNRS)

Session Classification: Session 2

Contribution ID: 6

Type: **not specified**

Axion Quality in the meV mass range

Tuesday 28 October 2025 09:00 (30 minutes)

Presenter: DI LUZIO, Luca (Istituto Nazionale di Fisica Nucleare)

Session Classification: Session 3

Contribution ID: 7

Type: **not specified**

meV axions in String Theory

Tuesday 28 October 2025 09:30 (30 minutes)

Presenter: RIGHI, Nicole

Session Classification: Session 3

Contribution ID: 8

Type: **not specified**

IAXO: status and potential to probe the meV mass region

Tuesday 28 October 2025 10:00 (30 minutes)

Presenter: RUZ ARMENDARIZ, Jaime (TU Dortmund)

Session Classification: Session 3

Contribution ID: 9

Type: **not specified**

Challenges and prospects for axion cavity searches in the (0.1-1) meV mass region: CADEX project

Tuesday 28 October 2025 11:00 (30 minutes)

Presenter: GOMEZ, Alicia

Session Classification: Session 4

Contribution ID: **10**

Type: **not specified**

Discovery of the Axion Quasiparticle, and prospects for detecting meV axion dark matter

Tuesday 28 October 2025 11:30 (30 minutes)

Presenter: MARSH, David

Session Classification: Session 4