

# **Optomechanics for dark matter detection - 2nd edition**

## **Report of Contributions**

Contribution ID: 1

Type: **not specified**

## Opening

*Friday, 9 April 2021 11:00 (5 minutes)*

**Presenter:** CARNEY, Dan

Contribution ID: 2

Type: **not specified**

## Ultra-light DM: theory overview

*Friday, 9 April 2021 11:05 (25 minutes)*

**Presenter:** LIU, Zhen

**Session Classification:** Ultra-light DM

Contribution ID: 4

Type: **not specified**

## **Mechanical detectors of ultralight DM**

*Friday, 9 April 2021 11:30 (25 minutes)*

**Presenter:** SINGH, Swati

**Session Classification:** Ultra-light DM

Contribution ID: 6

Type: **not specified**

## **Light DM: Theory overview**

*Friday, 9 April 2021 13:45 (25 minutes)*

**Presenter:** KNAPEN, Simon

**Session Classification:** "Light" DM

Contribution ID: 7

Type: **not specified**

## **Toward meV Thresholds for Sub-GeV DM in Crystal Targets**

**Presenter:** KURINSKY, Noah

**Session Classification:** "Light" DM

Contribution ID: 8

Type: **not specified**

## Counting $\mu\text{eV}$ phonons in a ng-scale superfluid helium cavity

*Friday, 9 April 2021 14:10 (25 minutes)*

**Presenter:** HARRIS, Jack

**Session Classification:** "Light" DM

Contribution ID: 9

Type: **not specified**

## **Search for Composite Dark Matter with Optically Levitated Sensors**

*Friday, 9 April 2021 14:35 (25 minutes)*

**Presenter:** AFEK, Gadi

**Session Classification:** "Light" DM



Contribution ID: **10**

Type: **not specified**

## **Heavy DM: Theory overview**

*Friday, 9 April 2021 15:35 (25 minutes)*

**Presenter:** LONG, Andrew

**Session Classification:** Heavy DM

Contribution ID: 11

Type: **not specified**

# The Windchime Project

*Friday, 9 April 2021 16:00 (25 minutes)*

**Presenter:** QIN, Juehang

**Session Classification:** Heavy DM

Contribution ID: 12

Type: **not specified**

# Quantum sensors for dark matter, and beyond

*Friday, 9 April 2021 16:25 (25 minutes)*

**Presenter:** TAYLOR, Jake

**Session Classification:** Heavy DM

Contribution ID: 13

Type: **not specified**

## **Sub-SQL quantum noise measurements at LIGO**

*Friday, 9 April 2021 12:20 (25 minutes)*

**Presenter:** MCCULLER, Lee

**Session Classification:** Technology updates

Contribution ID: 14

Type: **not specified**

## **Optimal control of a levitated particle at the SQL**

*Friday, 9 April 2021 12:45 (25 minutes)*

**Presenter:** MAGRINI, Lorenzo

**Session Classification:** Technology updates

Contribution ID: 15

Type: **not specified**

## **Searching for vector dark matter with an optomechanical accelerometer**

*Friday, 9 April 2021 11:55 (25 minutes)*

**Presenter:** WILSON, Dalziel

**Session Classification:** Ultra-light DM