

## **Session Program**

**March 29, 2023 to April 1, 2023**

### **UCLA Dark Matter 2023**

***SESSION 9: Dark Matter Theory (CHAIRS:  
Volodymyr Takhistov- QUP-KEK, Japan, and  
Edoardo Vitagliano- Hebrew U. of Jerusalem,  
Israel)***

UCLA, PAB- 1-425

UCLA Department of Physics and Astronomy 475 Portola Plaza, Los Angeles, CA 90095

## Thu, March 30

4:30 PM

### SESSION 9: Dark Matter Theory (CHAIRS: Volodymyr Takhistov- QUP-KEK, Japan, and Edoardo Vitagliano- Hebrew U. of Jerusalem, Israel)

Session |

Location: UCLA, PAB- 1-425, UCLA Department of Physics and Astronomy 475 Portola Plaza, Los Angeles, CA 90095

4:30 - 4:45 PM

#### Strong Supernova 1987A Constraints on Bosons Decaying to Neutrinos

**Speaker**

Edoardo Vitagliano

4:45 - 5:00 PM

#### Cosmology of Axion Rotation

**Speaker**

Keisuke Harigaya

5:00 - 5:15 PM

#### Dark matter direct detection from single phonons to nuclear recoils

**Speaker**

Tongyan Lin

5:15 - 5:30 PM

#### Light thermal dark matter and MeV gamma-ray observation

**Speaker**

Dr Shigeki Matsumoto

5:30 - 5:45 PM

#### New Constraints on Dark Matter, Cosmic Neutrino Profiles, and Neutrino Masses through Gravity and Quantum Sensors

**Speaker**

Yu-Dai Tsai

5:45 - 6:00 PM

#### Axion detection with optomechanical cavities

**Speaker**

Clara Murgui

6:00 - 6:15 PM

#### SUSY dark matter: waxing, not waning

**Speaker**

Howard Baer

6:15 - 6:30 PM

#### Dark Matter Direct Detection and Collider Search Complementarity

**Speaker**

Sven Heinemeyer

6:30 - 6:45 PM

#### Spin 3/2 FIMP: direct detection and collider bounds

**Speaker**

Francesco Costa

6:45 - 7:00 PM

#### Constraints on Spin dependent and Spin Independent Dark Matter-Electron Scattering

**Speaker**

Mukesh Kumar Pandey

7:00 - 7:15 PM

**Experimental signatures for direct, indirect, and collider detection of a 70 GeV dark matter WIMP with precisely-defined second-order gauge couplings**

**Speaker**

Roland Allen

7:15 PM