

# **PandaX-xT 2nd Open Meeting**

## **Report of Contributions**

Contribution ID: 1

Type: **not specified**

# **On the Microscopic Derivation of Covariant Density Functionals and their Application to Neutrinoless Double-Beta-Decay**

**Presenter:** Mr RING, Peter

Contribution ID: 2

Type: **not specified**

## Welcome

*Saturday, 11 April 2026 09:00 (10 minutes)*

**Presenter:** LIN, Qing

Contribution ID: 3

Type: **not specified**

## Overview of PandaX

*Saturday, 11 April 2026 09:10 (50 minutes)*

**Presenter:** LIU, Jianglei (Shanghai Jiao Tong University)

Contribution ID: 4

Type: **not specified**

## **PandaX Cryostat Status**

*Saturday, 11 April 2026 10:30 (20 minutes)*

**Presenter:** ZHANG, Tao

Contribution ID: 5

Type: **not specified**

## **PandaX TPC**

*Saturday, 11 April 2026 10:50 (20 minutes)*

**Presenter:** ZHOU, Ning (Shanghai Jiao Tong University)

Contribution ID: 6

Type: **not specified**

## Photosensors for the TPC

*Saturday, 11 April 2026 11:10 (20 minutes)*

**Presenter:** HAN, Ke (SJTU)

Contribution ID: 7

Type: **not specified**

## **VETO system**

*Saturday, 11 April 2026 11:30 (20 minutes)*

**Presenter:** HUANG, Juntong (Shanghai Jiao Tong University)

Contribution ID: 8

Type: **not specified**

## Electronics and Trigger

*Saturday, 11 April 2026 13:30 (20 minutes)*

**Presenter:** WU, Weihao (SJTU)

Contribution ID: 9

Type: **not specified**

## Cryogenics

*Saturday, 11 April 2026 13:50 (20 minutes)*

**Presenter:** ZHAO, Li (Shanghai Jiao Tong University)

Contribution ID: **10**

Type: **not specified**

## **Krypton and Radon Distillation**

*Saturday, 11 April 2026 14:10 (20 minutes)*

**Presenter:** WANG, Zhou (Shanghai Jiao Tong University)

Contribution ID: 11

Type: **not specified**

## Low Background Techniques Task Force

*Saturday, 11 April 2026 15:00 (20 minutes)*

**Presenter:** MENG, Yue (Shanghai Jiao Tong University)

Contribution ID: 12

Type: **not specified**

## Calibration

*Saturday, 11 April 2026 15:20 (20 minutes)*

**Presenter:** ZHOU, Xiaopeng (Beihang University)

Contribution ID: 13

Type: **not specified**

## **DAQ, Online and Offline computing**

*Saturday, 11 April 2026 15:40 (20 minutes)*

**Presenter:** CHEN, Xun (SJTU)

Contribution ID: 14

Type: **not specified**

## Ultracore Ti R&D

*Sunday, 12 April 2026 09:00 (30 minutes)*

**Presenter:** CHEPURNOV, Alexander (Skobelcyn Institute of Nuclear Physics, Lomonosov Moscow State University)

Contribution ID: 15

Type: **not specified**

## **Radon mitigation for low-background experiments: methodologies, facilities, and future directions**

*Sunday, 12 April 2026 09:30 (30 minutes)*

**Presenter:** MARCELO GREGORIO, Robert Renz

Contribution ID: **16**

Type: **not specified**

## **R&D activities at CTU**

*Sunday, 12 April 2026 10:30 (30 minutes)*

**Presenter:** STEKL, Ivan

Contribution ID: 17

Type: **not specified**

## **Kr Assay System R&D**

*Sunday, 12 April 2026 11:00 (30 minutes)*

**Presenter:** YE, Jingqiang (The Chinese University of Hong Kong, Shenzhen)

Contribution ID: **18**

Type: **not specified**

## Opening Speech

*Monday, 6 April 2026 08:50 (10 minutes)*

**Presenter:** LIU, Jianglei

Contribution ID: 19

Type: **not specified**

# **On the Microscopic Derivation of Covariant Density Functionals and their Application to Neutrinoless Double-Beta-Decay**

*Monday, 6 April 2026 09:00 (1 hour)*

**Presenter:** RING, Peter

Contribution ID: 20

Type: **not specified**

## **Relativistic calculations of nuclear matrix elements for neutrinoless double beta decay**

*Monday, 6 April 2026 10:30 (1 hour)*

**Presenter:** ZHAO, Pengwei

Contribution ID: 21

Type: **not specified**

# Lepton Number Violation: Inter-Frontier Connections

*Monday, 6 April 2026 14:00 (1 hour)*

**Presenter:** RAMSEY-MUSOLF, Michael

Contribution ID: 22

Type: **not specified**

# Electroweak properties of finite nuclei from nuclear ab initio calculations

*Monday, 6 April 2026 15:30 (1 hour)*

**Presenter:** MIYAGI, Takayuki

Contribution ID: 23

Type: **not specified**

## **Ab initio calculations of structure factors for spin-dependent WIMP-nucleus scattering**

*Monday, 6 April 2026 17:00 (1 hour)*

**Presenter:** LI, Zhen

Contribution ID: 24

Type: **not specified**

## Dark glueball direct detection

*Tuesday, 7 April 2026 09:00 (1 hour)*

Contribution ID: 25

Type: **not specified**

## **Theoretical description for the nuclear beta decay around $^{214}\text{Pb}$**

*Tuesday, 7 April 2026 10:30 (1 hour)*

**Presenter:** MA, Chang

Contribution ID: 26

Type: **not specified**

# Atomic Response Functions for Light Dark Matter Direct Detection

*Tuesday, 7 April 2026 14:00 (1 hour)*

**Presenter:** LIU, Cheng-Pang

Contribution ID: 27

Type: **not specified**

# Glueball Dark Matter: from Gravitational Waves to Direct Detection

*Tuesday, 7 April 2026 15:30 (1 hour)*

**Presenter:** WANG, Zhiwei

Contribution ID: 28

Type: **not specified**

## **Hunting new physics with neutrinos in the light of experimental progress**

*Wednesday, 8 April 2026 09:00 (1 hour)*

**Presenter:** LINDNER, Manfred

Contribution ID: 29

Type: **not specified**

## **R2D2 : A high pressure TPC for neutrinoless double beta decay search**

*Wednesday, 8 April 2026 10:30 (1 hour)*

**Presenter:** PIQUEMAL, Fabrice

Contribution ID: **30**

Type: **not specified**

## **Novel Signatures in Double Beta Decay**

*Wednesday, 8 April 2026 14:00 (1 hour)*

**Presenter:** DEPPISCH, Frank

Contribution ID: 31

Type: **not specified**

# **Nuclear physics connection for precision neutrino physics**

*Wednesday, 8 April 2026 15:30 (1 hour)*

**Presenter:** LI, Yufeng

Contribution ID: 32

Type: **not specified**

## Lepton Number Violation at Colliders

*Wednesday, 8 April 2026 17:00 (1 hour)*

Contribution ID: 33

Type: **not specified**

## Neutrinoless Double Beta Decay: Present and Future

*Thursday, 9 April 2026 09:00 (1 hour)*

**Presenter:** SIMKOVIC, Fedor

Contribution ID: 34

Type: **not specified**

## **Innovative theoretical model for spin-isospin excitations and beta-decay**

*Thursday, 9 April 2026 10:20 (1 hour)*

**Presenter:** SAGAWA, Hiroyuki

Contribution ID: 35

Type: **not specified**

## **Opportunities for double-beta decays and direct dark matter searches: a nuclear theory viewpoint**

*Thursday, 9 April 2026 14:00 (1 hour)*

**Presenter:** MENÉNDEZ, Javier

Contribution ID: 36

Type: **not specified**

## **Lepton Number Violating Electron Scattering: Exploring Physics Beyond the Standard Model at Accelerator Facilities**

*Thursday, 9 April 2026 15:30 (1 hour)*

Contribution ID: 37

Type: **not specified**

# Signals of a Light Dark Sector: From the Cosmos to Direct Detection

*Thursday, 9 April 2026 17:00 (1 hour)*

**Presenter:** YU, Haibo