

**Joint DRD5-Unicorn
workshop on radiation
damage to quantum dots**

Report of Contributions

Contribution ID: 1

Type: **not specified**

Welcome

Wednesday, 26 November 2025 09:00 (10 minutes)

Presenter: DOSER, Michael (Massachusetts Inst. of Technology (US))

Contribution ID: 2

Type: **not specified**

Lecture - Dos and don'ts with nanocrystals

Wednesday, 26 November 2025 09:10 (1 hour)

Presenter: BROVELLI, Sergio

Contribution ID: 3

Type: **not specified**

Bulk vs. Nanoscintillators: Understanding the Key Differences

Wednesday, 26 November 2025 14:00 (20 minutes)

Presenter: DUJARDIN, Christophe (Universite Claude Bernard Lyon I (FR))

Session Classification: Nanocomposite R&D

Contribution ID: 4

Type: **not specified**

Synthesis and characterization of Cs₂TeCl₆ powder for scintillators

Wednesday, 26 November 2025 11:00 (20 minutes)

Presenter: PROUZOVA PROCHAZKOVA, Lenka

Session Classification: Nanocomposite R&D

Contribution ID: 5

Type: **not specified**

Ionizing Radiation Effects and Defect Control in Perovskite NCs scintillators

Wednesday, 26 November 2025 10:10 (20 minutes)

Presenter: CARULLI, Francesco (Università di Milano Bicocca)

Session Classification: Nanocomposite R&D

Contribution ID: 6

Type: **not specified**

Quantum-Cooperative Scintillation in Weakly Confined Lead-Halide Perovskites: From Giant-Oscillator-Strength to Coherent Superfluorescent Ultrafast Scintillators

Wednesday, 26 November 2025 12:30 (20 minutes)

Presenter: ZAFFALON, Matteo (University Milano-Bicocca)

Session Classification: Nanocomposite R&D

Contribution ID: 7

Type: **not specified**

Development of scintillating nanocomposites based on cesium lead halide nanocrystals for radiation detection

Wednesday, 26 November 2025 12:00 (20 minutes)

Presenter: KRAL, Jan (Czech Technical University, Institute of Physics Czech Academy of Sciences)

Session Classification: Nanocomposite R&D

Contribution ID: 8

Type: **not specified**

Quantum dots for HEP, space and medicine

Wednesday, 26 November 2025 14:30 (20 minutes)

Presenter: CHOUDHURY, Tribikram (Institute of Engineering and Management (IN))

Session Classification: Irradiation and Beam Tests

Contribution ID: 9

Type: **not specified**

Real-time capture of electron-induced material degradation using CL-SEM tools

Wednesday, 26 November 2025 15:00 (20 minutes)

Presenter: SOLTANAITE, Gabija (Vilnius university)

Session Classification: Irradiation and Beam Tests

Contribution ID: 11

Type: **not specified**

NanoCal: Development of nanocomposite scintillators for high-energy physics

Wednesday, 26 November 2025 16:20 (20 minutes)

Presenter: MOULSON, Matthew David

Session Classification: Applications

Contribution ID: 12

Type: **not specified**

Towards chromatic calorimetry using nanocomposites

Wednesday, 26 November 2025 16:50 (20 minutes)

Presenter: ZABLOUDIL, Vojtech (Czech Technical University in Prague (CZ))

Session Classification: Applications

Contribution ID: 13

Type: **not specified**

Ab-initio simulation of quantum dots

Wednesday, 26 November 2025 17:50 (20 minutes)

Presenter: MATAS, Marek (CERN)

Session Classification: Simulation

Contribution ID: 14

Type: **not specified**

Geant4-based simulation of CCAL prototype

Wednesday, 26 November 2025 17:20 (20 minutes)

Presenter: HADDAD, Yacine (Universitaet Bern (CH))

Session Classification: Simulation

Contribution ID: 16

Type: **not specified**

Proton and Neutron irradiation facilities for community access

Wednesday, 26 November 2025 15:30 (20 minutes)

Presenter: Dr GKOU GKOUSIS, Vagelis (University of Zurich)

Session Classification: Irradiation and Beam Tests

Contribution ID: 17

Type: **not specified**

Investigating an unorthodox approach for preparing glass nanocomposites

Wednesday, 26 November 2025 11:30 (20 minutes)

Presenter: ZAJÍC, František (Faculty of Nuclear Sciences and Physical Engineering of the Czech Technical University, Institute of Physics of the Czech Academy of Sciences)

Session Classification: Nanocomposite R&D