

## **Session Program**

**29-31 May 2024**



## **Forum on Tracking Detector Mechanics 2024**

### ***Talks***

Purdue CMSC, Large Conference room  
Purdue University 1105 Endeavour Dr Suite 100, West Lafayette, IN 47906, USA <https://www.purdue.edu/cmssc/>

# Wednesday 29 May

11:10

## Talks: Session B

**Session** |

**Location:** Purdue CMSC, Large Conference room, Purdue University 1105 Endeavour Dr Suite 100, West Lafayette, IN 47906, USA <https://www.purdue.edu/cmssc/>

11:10–11:30

### Large-Scale Comprehensive Thermal Simulation of the CBM Silicon Tracking System (STS) on the Virgo Cluster at GSI

**Speaker**

Ilya Elizarov

11:40–12:00

### GridPix TPC as a tracking and PID device

**Speaker**

Prakhar Garg

12:10–12:30

### Outsource production and the design of Phase-2 CO<sub>2</sub> cooling systems.

**Speaker**

Krzysztof Sliwa

12:40

13:30

## Talks: Session C

**Session** |

**Location:** Purdue CMSC, Large Conference room, Purdue University 1105 Endeavour Dr Suite 100, West Lafayette, IN 47906, USA <https://www.purdue.edu/cmssc/>

13:30–13:50

### Overview of the CO<sub>2</sub> cooling DEMO obtained results and a prediction of future system behavior.

**Speakers**

Bart Verlaet, Youri Penders

14:00–14:20

### Flow distribution capillary tube testing for the CMS silicon detector upgrades

**Speaker**

Derek Jan Langedijk

14:30–14:50

### TB2S Ladder Assembly and Qualification for CMS Outer Tracker System

**Speaker**

Saleh Muhammad

15:00

15:20

## Talks: Session D

**Session** |

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15:20–15:50

### TFPX-TBPX adjustable mechanical connection tests for the Phase II integration of the CMS Inner Tracker

**Speaker**

Daniele Benvenuti

16:00–16:30

**Structural Composite Design, Simulation, and Testing of the HL-CMS Inner and Outer Tracker Support Tubes**

**Speaker**

Ben Denos

16:40–17:00

**Design and testing of a dynamic support frame structure for the CMS tracker installation process**

**Speaker**

Mikko Tapani Barinoff

17:10

## Thursday 30 May

08:30

### Talks: Session E

**Session** |

**Location:** Purdue CMSC, Large Conference room, Purdue University 1105 Endeavour Dr Suite 100, West Lafayette, IN 47906, USA <https://www.purdue.edu/cmhc/>

08:30–08:50

#### Design and manufacture of the supports for the ATLAS barrel strip staves

**Speaker**

Qing Yang

09:00–09:20

#### Development of a robotic system for automatic prepreg layup and production of co-cured facesheets for the ATLAS ITk strip end-cap detector

**Speaker**

Mr Sören Ahrens

09:30–09:50

#### First experience from the system test setup for the ATLAS ITk strips end-cap detector

**Speaker**

Jan-Hendrik Arling

10:00

10:30

### Talks: Session F

**Session** |

**Location:** Purdue CMSC, Large Conference room, Purdue University 1105 Endeavour Dr Suite 100, West Lafayette, IN 47906, USA <https://www.purdue.edu/cmhc/>

10:30–10:50

#### Welding Development for Thin-Wall Ti Cooling Tubes for the ATLAS Inner Tracker

**Speaker**

Jerin Pappachan

11:00

11:00

### Talks: Industry talks

**Session** |

**Location:** Purdue CMSC, Large Conference room, Purdue University 1105 Endeavour Dr Suite 100, West Lafayette, IN 47906, USA <https://www.purdue.edu/cmhc/>

11:00–11:20

#### Toray: Advanced Composites - Business Overview

**Speaker**

Greg Waldrip

11:30–11:50

#### Rockwest: CMS BTST Fabrication Methods and Capabilities Overview

**Speaker**

Johnny Marks

11:55

14:00

**Talks: Session G****Session** |**Location:** Purdue CMSC, Large Conference room, Purdue University 1105 Endeavour Dr Suite 100, West Lafayette, IN 47906, USA <https://www.purdue.edu/cmssc/>

14:00–14:20

**Investigating Cracks in ATLAS ITk Strips****Speakers**

Giorgio Vallone, Haider Abidi

14:30–14:50

**Mechanical Performance of Irradiated Adhesive Samples for ATLAS ITk****Speakers**

Neal David Hartman, Todd Claybaugh

15:00–15:20

**A thermal interface material for the PS modules of the CMS Outer Tracker upgrade.****Speaker**

Moritz Guthoff

15:30

16:15

**Talks: Session H****Session** |**Location:** Purdue CMSC, Large Conference room, Purdue University 1105 Endeavour Dr Suite 100, West Lafayette, IN 47906, USA <https://www.purdue.edu/cmssc/>

16:15–16:35

**Thermal Metrology for Understanding Tracking Detector Materials****Speaker**

Zixin Xiong

16:45–17:05

**A Finite Volume Analysis for evaluating the thermal performance of an air-cooling system for the IDEA Vertex Detector at FCC-ee.****Speaker**

Cristiano Turroni

17:35