**Session Program**

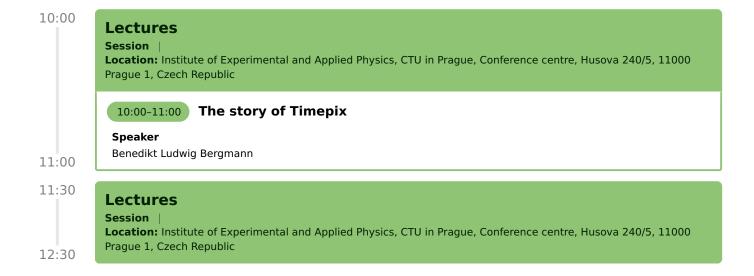**30 June 2025 to 11 July 2025**



# IEEE NPSS Prague EduCom International Summer School (PEISS) 2025

## *Lectures*

Institute of Experimental and Applied Physics, CTU in Prague, Conference centre
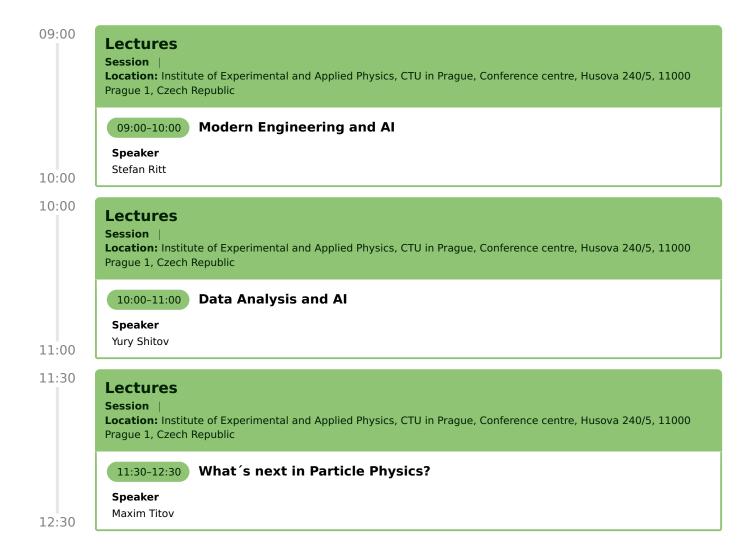Husova 240/5, 11000 Prague 1, Czech Republic

# Monday 30 June

10:00

## Lectures

**Session** |

**Location:** Institute of Experimental and Applied Physics, CTU in Prague, Conference centre, Husova 240/5, 11000 Prague 1, Czech Republic

10:00–11:00 **The story of Timepix**

**Speaker**

Benedikt Ludwig Bergmann

11:00

11:30

## Lectures

**Session** |

**Location:** Institute of Experimental and Applied Physics, CTU in Prague, Conference centre, Husova 240/5, 11000 Prague 1, Czech Republic

12:30

# Tuesday 1 July

09:00

**Lectures**
**Session** |
**Location:** Institute of Experimental and Applied Physics, CTU in Prague, Conference centre, Husova 240/5, 11000 Prague 1, Czech Republic

09:00–10:00   **Interaction of Radiation With Matter**

**Speaker**
Tomáš Trojek

10:00

10:00

**Lectures**
**Session** |
**Location:** Institute of Experimental and Applied Physics, CTU in Prague, Conference centre, Husova 240/5, 11000 Prague 1, Czech Republic

10:00–11:00   **TimePix for Imaging and Tomography**

**Speaker**
Jan Dudak

11:00

11:30

**Lectures**
**Session** |
**Location:** Institute of Experimental and Applied Physics, CTU in Prague, Conference centre, Husova 240/5, 11000 Prague 1, Czech Republic

11:30–12:30   **Gaseous Detectors**

**Speaker**
Maxim Titov

12:30

# Wednesday 2 July

09:00

## Lectures
**Session** |
**Location:** Institute of Experimental and Applied Physics, CTU in Prague, Conference centre, Husova 240/5, 11000 Prague 1, Czech Republic

09:00–10:00 · **Modern Engineering and AI**

**Speaker**
Stefan Ritt

10:00

10:00

## Lectures
**Session** |
**Location:** Institute of Experimental and Applied Physics, CTU in Prague, Conference centre, Husova 240/5, 11000 Prague 1, Czech Republic

10:00–11:00 · **Data Analysis and AI**

**Speaker**
Yury Shitov

11:00

11:30

## Lectures
**Session** |
**Location:** Institute of Experimental and Applied Physics, CTU in Prague, Conference centre, Husova 240/5, 11000 Prague 1, Czech Republic

11:30–12:30 · **What´s next in Particle Physics?**

**Speaker**
Maxim Titov

12:30

# Thursday 3 July

09:00

## Lectures
**Session** |
**Location:** Institute of Experimental and Applied Physics, CTU in Prague, Conference centre, Husova 240/5, 11000 Prague 1, Czech Republic

09:00–10:00  **Accelerators for the Present and Future of Particle Physics**

**Speaker**
Maxim Titov

10:00

10:00

## Lectures
**Session** |
**Location:** Institute of Experimental and Applied Physics, CTU in Prague, Conference centre, Husova 240/5, 11000 Prague 1, Czech Republic

10:00–11:00  **Radiation detectors: Imaging what you cannot see**

**Speaker**
Cinzia Da Via

11:00

11:30

## Lectures
**Session** |
**Location:** Institute of Experimental and Applied Physics, CTU in Prague, Conference centre, Husova 240/5, 11000 Prague 1, Czech Republic

11:30–12:30  **Photodetectors and Photon Counting**

**Speaker**
Masaharu Nomachi

12:30

# Monday 7 July

09:00

## Lectures
**Session**  |
**Location:** Institute of Experimental and Applied Physics, CTU in Prague, Conference centre, Husova 240/5, 11000 Prague 1, Czech Republic

09:00–10:00   **Introduction to GATE Exercise**

**Speaker**
Trang Hoang

10:00

10:00

## Lectures
**Session**  |
**Location:** Institute of Experimental and Applied Physics, CTU in Prague, Conference centre, Husova 240/5, 11000 Prague 1, Czech Republic

10:00–11:00   **Basic Applications in Fundamental Research - Neutrino Physics**

**Speaker**
Rastislav Hodak

11:00

11:30

## Lectures
**Session**  |
**Location:** Institute of Experimental and Applied Physics, CTU in Prague, Conference centre, Husova 240/5, 11000 Prague 1, Czech Republic

11:30–12:30   **Measuring picoseconds and GHz**
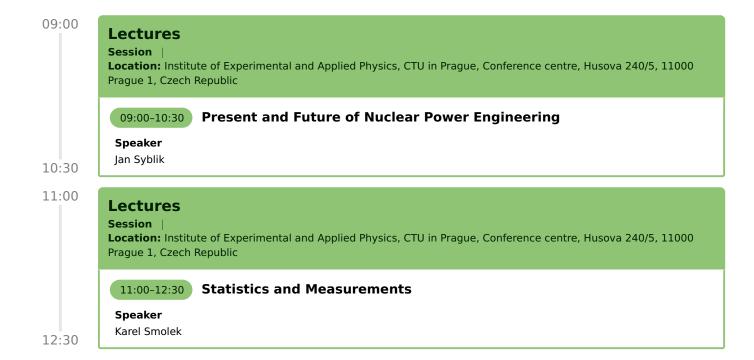
**Speaker**
Stefan Ritt

12:30

# Tuesday 8 July

09:00

## Lectures
**Session** |
**Location:** Institute of Experimental and Applied Physics, CTU in Prague, Conference centre, Husova 240/5, 11000 Prague 1, Czech Republic

09:00–10:00 **Astrophysics**

**Speaker**
Adam Smetana

10:00

10:00

## Lectures
**Session** |
**Location:** Institute of Experimental and Applied Physics, CTU in Prague, Conference centre, Husova 240/5, 11000 Prague 1, Czech Republic

10:00–11:00 **The NPSS Booklet about Radiation Facts**

**Speaker**
Patrick Le Dû

11:00

11:30

## Lectures
**Session** |
**Location:** Institute of Experimental and Applied Physics, CTU in Prague, Conference centre, Husova 240/5, 11000 Prague 1, Czech Republic

11:30–12:30 **Overview of Astroparticle Observations**

**Speaker**
Robert Filgas

12:30

# Wednesday 9 July

09:00

## Lectures
**Session** |
**Location:** Institute of Experimental and Applied Physics, CTU in Prague, Conference centre, Husova 240/5, 11000 Prague 1, Czech Republic

> 09:00–10:00   **Introduction to Medical Imaging – X-rays, CT, MRI**
>
> **Speaker**
> Andrea Gonzalez-Montoro

10:00

10:00

## Lectures
**Session** |
**Location:** Institute of Experimental and Applied Physics, CTU in Prague, Conference centre, Husova 240/5, 11000 Prague 1, Czech Republic

> 10:00–11:00   **Proton Therapy**
>
> **Speaker**
> Martin Grossmann

11:00

11:30

## Lectures
**Session** |
**Location:** Institute of Experimental and Applied Physics, CTU in Prague, Conference centre, Husova 240/5, 11000 Prague 1, Czech Republic

> 11:30–12:30   **Medical Imaging: PET**
>
> **Speaker**
> Andrea Gonzalez-Montoro

12:30

# Thursday 10 July

09:00

## Lectures
**Session** |
**Location:** Institute of Experimental and Applied Physics, CTU in Prague, Conference centre, Husova 240/5, 11000 Prague 1, Czech Republic

> 09:00–10:30 **Present and Future of Nuclear Power Engineering**
>
> **Speaker**
> Jan Syblik

10:30

11:00

## Lectures
**Session** |
**Location:** Institute of Experimental and Applied Physics, CTU in Prague, Conference centre, Husova 240/5, 11000 Prague 1, Czech Republic

> 11:00–12:30 **Statistics and Measurements**
>
> **Speaker**
> Karel Smolek

12:30

# Friday 11 July

09:00

## Lectures
**Session** |
**Location:** Institute of Experimental and Applied Physics, CTU in Prague, Conference centre, Husova 240/5, 11000 Prague 1, Czech Republic

09:00–09:30   **Highlighting your work: Some simple suggestions and hints**

**Speaker**

09:30

Patrick Le Dû