9th Micropattern Gaseous Detectors Conference 2026 in Prague

Hugo Natal da Luz

Institute of Experimental and Applied Physics Czech Technical University in Prague

7th of December, 2023





Reaching Prague

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Venue Accomodation

Fees Experience





- Central Europe,
- Very good air and ground connections.



The city of Prague

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Prominent physicists loving/living in Prague

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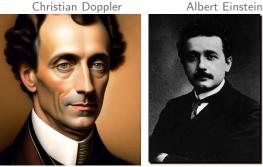
Science in Prague @IEAP And beyond MPGD'26 Venue Accomodation Fees Experience Remarks



Johanes Kepler



Christian Doppler





(1599-1601)

(1600 - 1609)

(1835 - 1847)

(1911-1912)



The IEAP CTU in Prague — General information

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Remarks

Institute of Experimental and Applied Physics, Czech Technical University in Prague:

- Located in the center of Prague in historical building of Bethelem Palace.
- Founded in May 2002 as an experimental unit of the CTU for research namely on particle and nuclear physics,
- 90 employees divided in 5 departments (Electronics and Software; Experimental Physics; Applied Physics and Technology; Theory and Modelling; Administrative and Technical Services),
- Most of the R&D dedicated to pixellated solid state detectors (Founding member of Medipix2/3/4 collaborations),
- Development of large are scintillators for neutrino and astroparticle experiments,
- MPGD group started 4 years ago,







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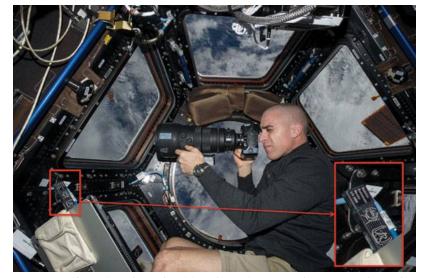
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Astronaut Chriss Cassidy in the ISS with a USB powered TPX particle tracker The tracker for ISS has been completely developed at IEAP and delivered to NASA in 2012.



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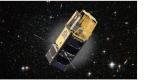
Fees

Experience

Remarks

Astroparticle physics

- Applications of pixel detectors in space
- Measurement of cosmic rays in space
- Pixel detectors in X-ray telescopes
- SATRAM is the first Timepix based particle telescope, operating in open space since May 2013







RTG imaging with sub-micron resolution

♦ Foraminifera – one-cell sea organism









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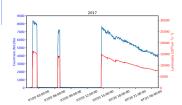
ATLAS

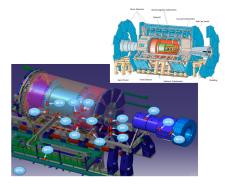
ATLAS-TPX network - radiation fields measurement and luminosity monitoring

ATLAS hybrid pixel <u>detector networks</u> ATLAS-MPX/TPX <u>gradually installed</u> in <u>the ATLAS</u> experiment <u>starting</u> in 2008 and <u>then</u> in 2014 in <u>the MoEDAL</u> experiment

Tau-trigger contribution

AFP/ALFA upgrade







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Remarks

Van de Graaff accelerator

- Proton and ⁴He up to 2 MeV/A
- works also as a source of monoenergetic neutrons from 300 keV to 17MeV
- VdG department hosts the MPGD lab.



Neutrino and underground experiments

• Experiments for the measurement of double beta decay in the LSM underground laboratory in <u>Modane</u>, France

- > NEMO 3, SuperNEMO, SPT, TGV, OBELIX
- · Technologies for underground experiments
 - > Ultra-low background technologies
 - > Development of plastic scintillating detectors
- Theory for double beta decay.
- PICO experiment
 - > SNOLAB underground laboratory.
 - Detection of <u>neutralinos</u> as dark matter candidates using a bubble detector.





Science *NOT* at IEAP CTU, but near Prague

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Fees

Experience

Remarks



Extreme Light Infrasctructure ERIC — **ELI beamlines:** pan-European research Infrastructure hosting the world's most intense lasers.

Nuclear Physics Institute, Czech Academy of Sciences: cyclotrons, microtron, tandetron, research nuclear reactor.





The conference

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Fees Experience

Remarks

Proposed date: 7-11 September 2026

Conference venue

The city hosts many conferences every year.

There are many possible venues (we show three here):

- Balling Hall of the National Library of Technology,
- Clarion Congress Hotel Prague,
- Café Louvre.

The IEAP has also several meeting rooms, the lagest one for \sim 70 participants.



Balling Hall of the National Library of Technology

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- Situated in the campus of the CTU, administrated by the University.
- Capacity for 196 people (182 with direct access to 230 V sockets)
- Additional 50 balcony seats.
- The gallery area around the hall has space for poster presentation, coffee breaks, buffet...
- Fully accessible.



Clarion Congress Hotel Prague

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- Congress centre fully adapted for this type of event.
- The conference service per participant is fixed and the room/hall is provided according to the number of participants (rooms Tycho and Kepler can be merged to hold 150 people).
- Coffee breaks and lunch provided in the venue and included in the price.
- Accommodation available on-site.
- Less personal venue (adapted for corporate environment).
- Fully accessible.



Café Louvre

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Remarks







- located in the centre of Prague at walking distance to most of the attractions.
- It has a conference centre with a large hall for up to 150 people (could be tight) and a small lounge for up to 35 people.
- The whole floor can be reserved for us.
- Lunch and coffee breaks on-site.
- Access through small staircase.

Karel Čapek, Albert Einstein, and Franz Kafka. Famous personalities from the cultural and political spheres visit us even today.











Accommodation

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MPGD'26 Venue

Accomodation

Experience

Remarks

Quick google search of hotels in Prague (1 Eur \sim 25 CZK):



- Finding cheap accommodation should not be a problem (neither finding expensive),
- Stars mark the three venues (Café Louvre is actually closer to the Vltava)



Approximate fees

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Estimations for 130 participants (without sponsors):

■ Conference space: 10 kEur

Coffee breaks, lunch: 26 kEur

■ Conference material: 3 kEur

■ Proceedings: 15 kEur

■ Social events (bus, tickets): 10 kEur

Total: ∼ 490 Eur/participant



Experience in the organisation of conferences

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Remarks

Limited personal experience (mainly from student and junior time)

- iWorld International Workshop on Imaging Detectors 2012, Figueira da Foz, Coimbra, Portugal (graphic design and some help in needed logistics),
- ISRP International Symposium on Radiation Physics 2006, Coimbra, Portugal (Assisting the editor of the proceedings),
- ICPS International Conference for Physics Students 1998, Coimbra, Portugal (Member of the organizing committee, around 350 participants).



Experience in the organisation of conferences

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Conferences organised recently in IEAP

- ANIMMA Advancements in Nuclear Instrumentation Measurement Methods and their Applications, June 21-25, 2021 (296 participants).
- MEDEX Matrix Elements for the Double beta decay Experiments, organized annually in our institute. Last edition in September 4-8, 2023, with 42 participants (it has counted with typically around 40 participants in previous editions).
- two SuperNEMO collaboration meetings, with 47 and 49 participants,
- EuCAPT Astroneutrino Theory Workshop 2021, 49 participants.

Other conferences organised by IEAP

- Medipix Collaboration Workshop in 2005 (~ 90 participants)
- RD50 Workshop in 2008 (~ 60 participants)
- iWorld Conference in 2009 (~ 300 participants)



Final remarks

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- Central location in Europe,
- Very accessible cost of living, promoting the participation of students,
- The city promotes socialisation and networking beyond the conference room,
- Good opportunity to boost the implementation of MPGD R&D in the Czech Republic.



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Thank you for your attention!