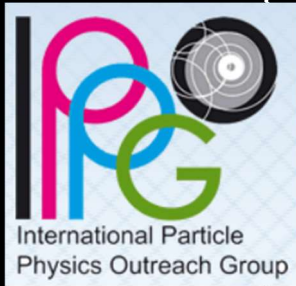


Kaunas University of Technology in CERN activities

Assoc. Prof. Dr. Brigita ABAKEVIČIENĖ

brigita.abakeviciene@ktu.lt



<https://physicsmasterclasses.org>

International Masterclasses in LITHUANIA, 2022





International Masterclasses:

- **Particle Therapy**

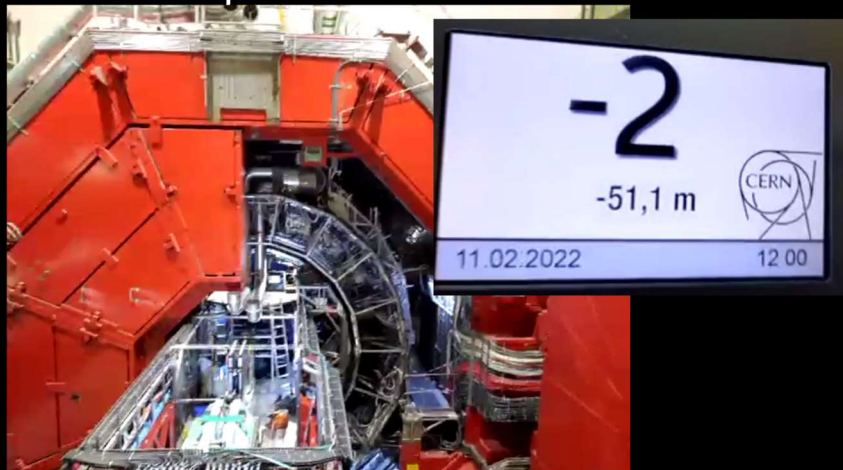
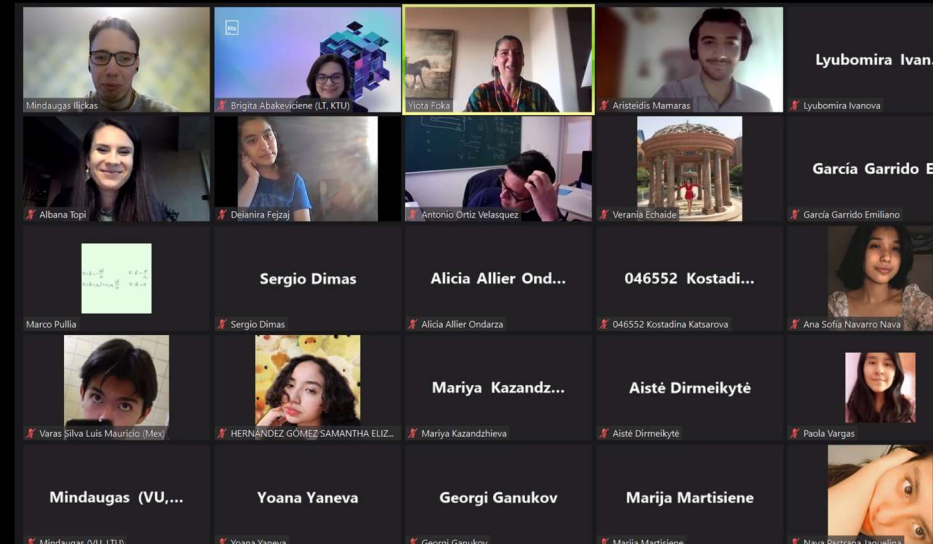
11th of February, 2022

<https://indico.cern.ch/event/1120845/>

- **CMS Physics**

30th of March, 2022

<https://indico.cern.ch/event/1139363/>



Virtual tour „Large Hadron Collider Experiment (ALICE)" (CERN)





28th of October, 2022

<https://indico.cern.ch/event/1191542/>



13th IPPOG Collaboration Board Meeting

Friday Oct 28, 2022, 3:15 PM → 6:30 PM Europe/Zurich

160/1-009 (CERN)

Pedro Abreu (LIP - Laboratorio de Instrumentação e Física Experimental de Partículas (PT)) , Steven Goldfarb (University of Melbourne (AU))

3:40 PM

Update on Potential New Members (possible vote)

Speaker: Steven Goldfarb (University of Melbourne (AU))

IPPOG_MOU_Adden...

IPPOG_MOU_Adden...

IPPOG_MoU.docx

IPPOG_MoU.pdf

CERN Baltic Group

Presentation of the CERN Baltic Group

Speaker: Dr Brigita Abakeviciene (GUEST)

International Masterclasses in LITHUANIA, 2022



MEISTARKLASE PAR DAĻIŅU PAĀTRINĀTĀJIEM MEDICĪNĀ

Particle Therapy Masterclass in LATVIA



2nd Baltic School of High-Energy and Accelerator Technologies

<https://indico.cern.ch/event/1123671/>

ktu



Organizers and Scientific Committee

Local Organizing Committee

- Prof. Fjodor Sergejev (TalTech, EE)
- Dr. Erki Kärber (TalTech, EE)
- Prof. Veronika Zadin (UT, EE)
- Veiko Viil (TalTech, EE)

Scientific Committee

- Prof. Fjodor Sergejev (TalTech)
- Prof. Veronika Zadin (UT)
- Prof. Toms Torims (RTU)
- Prof. Brigita Abakevičienė (KTU)
- Prof. Mārcis Auziņš (UL)
- Dr. Kristjan Kannike (NICBP)
- Dr. Thomas Gajdosik (VU)
- Dr. Jevgenijs Proskurins (RSU)





2nd CERN Baltic Conference

<https://indico.cern.ch/event/1147717/>

ktu

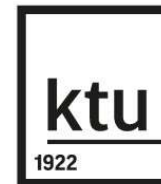




The CERN Accelerator School

Introduction to Accelerator Physics

<https://indico.cern.ch/event/1117526/>

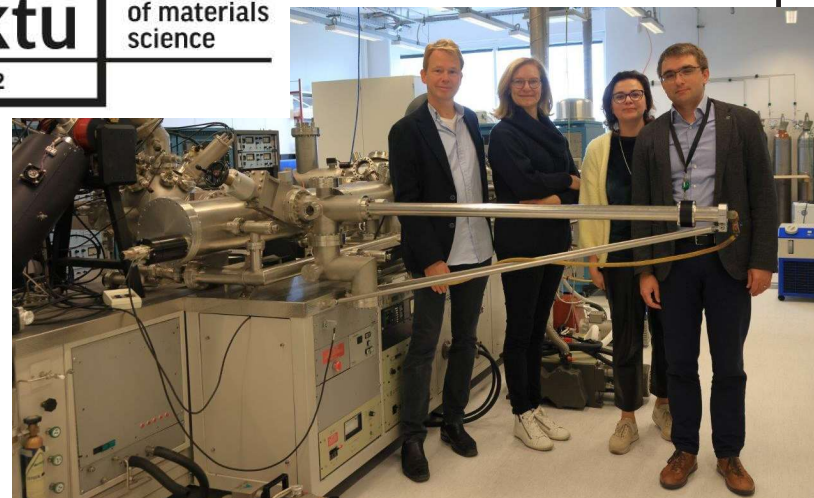


faculty of
mathematics and
natural sciences

18th of September – 1st of October, 2022, Kaunas, LITHUANIA



institute
of materials
science



Franc Tecker, Christine Vollinger
Brigita Abakevičienė, Tomas Tamulevičius



Participation in projects

Participation in projects

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Lithuanian Academy of Sciences

Research and experimental development projects are related to the activities of the European Organization for Nuclear Research (CERN).



**2021 - 2022 Materials and technologies for the high-gain Fast Timing
MPGD detector (FTM)**

(20 kEUR in 2021)

(49 kEUR in 2022)

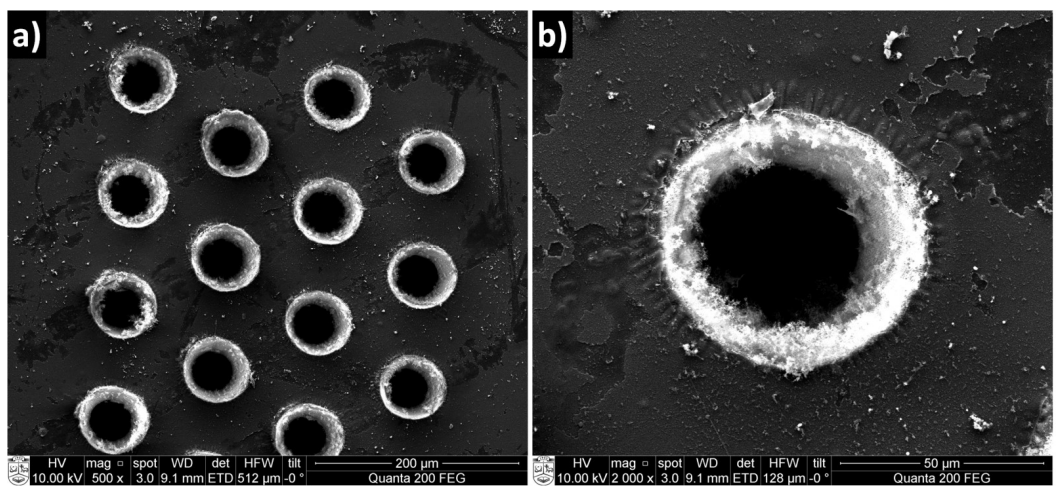
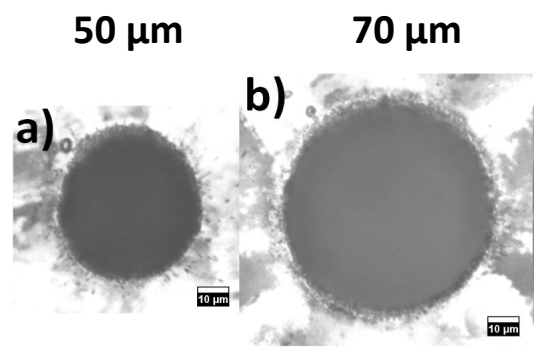
Project leader Prof. Sigitas Tamulevičius

(In collaboration with Dr. Piet Verwilligen, National Institute for Nuclear Physics and CERN)

Materials and technologies for the high-gain Fast Timing MPGD detector (FTM) (2021 – 2022)

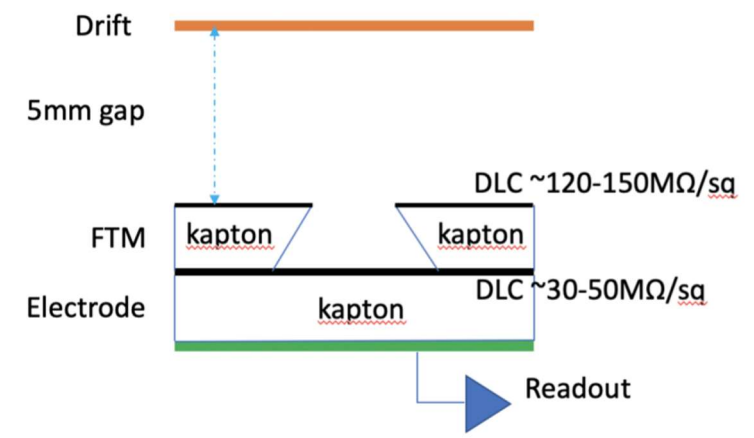
The project aim to improve the technology used in the production of a new type of Micro Pattern Gaseous Detectors (MPGD).

KAPTON average hole diameters:



SEM images of holes formed in **KAPTON** coated with **DLC**:
(a) small fraction of hole array formed by removing DLC prior to drilling,
(b) a single hole from the array, showing DLC crumpling.

Schematic overview of a single layer of the FTM prototype



Ch. Roskas, P. Verwilligen et al. Proceedings of Science, EPS-HEP2019 (2020) 158. DOI: [10.22323/1.364.0158](https://doi.org/10.22323/1.364.0158)



The Challenge Based Innovation Program (CBI)

ktu

2020

CERN reference KN4677/IPT



- **10 students and lecturers**
(Fall semester, 2022)

Contact person:

Assoc. Prof. Dr. Kristina Ukvalbergienė

Director of Department of Academic Affairs

kristina.ukvalbergiene@ktu.lt

Markus Nordberg

Development & Innovation (IPT-DI)

CERN 1211 Geneva 23 Switzerland

Mobile + 41 75 411 4452

markus.web.cern.ch



CERN CMS TIER2 project

19th of September, 2022 <https://indico.cern.ch/event/1189350/>
15th of November, 2022, at Kaunas

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The main goal is to unite high-performance computing resources from multiple academic institutions in a federated HPC resource pool for efficient processing of CERN CMS TIER II workloads.

- To establish framework between individual institutions IT teams for HPC resources availabilities and accessibilities
- To create collaboration and experience sharing platform for best practices of managing HPC resources and serving them to TIER II community.
- Using Baltic NREN's and GEANT optical networks infrastructure interconnect institutional HPC resources at international-Baltic level for at least of 100Gbps lines

Contact person from KTU:

Arvydas Žiliukas

Director of Department of Information Technology Services

Computer Networks Centre

arvydas.ziliukas@ktu.lt

Thank you for your attention !