# CERN Baltic Group –
## Activities of Kaunas University of Technology
## 2021

**Assoc. Prof. Dr. Brigita Abakevičienė**
brigita.abakeviciene@ktu.lt

**23rd of August, 2021**

# “Accelerator Schools”- accelerator and/or particle physics

## 22nd of March – 4th of April, 2020

https://indico.cern.ch/event/842297/

ktu faculty of mathematics and natural sciences 1922



RF for Accelerators, 22 March - 4 April 2020, Kaunas, Lithuania

ktu kauno technologijos universitetas 1922

Registration is open

RELATED LINKS

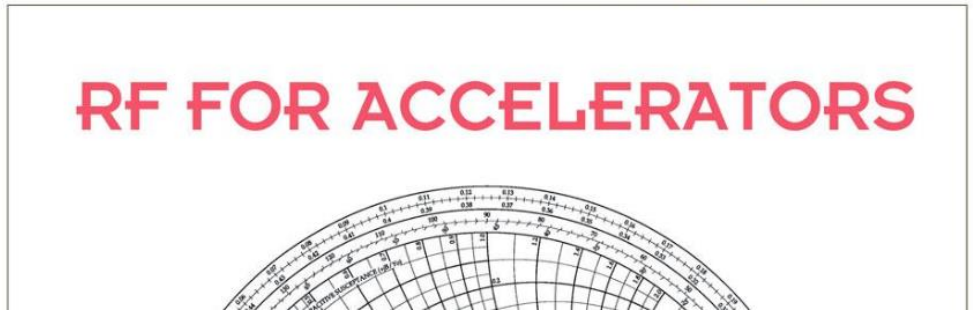
Indico page

Europa Royale Hotel

Kaunas University of Technology

Main | Overview | Financial aspects | Visas | Practical info

In collaboration with the Kaunas University of Technology (KTU) the CERN accelerator school is organizing a topical course on:



# International Masterclasses

## ➢ 24th of February, 2021

**CMS International Masterclass Hands on Particle Physics**

https://indico.cern.ch/event/1008631/timetable/

https://masterclass.ktu.edu/

## ➢ 24th of March, 2021 Hadron Therapy Masterclass

https://indico.cern.ch/event/1017747/

https://hadrontherapy.ktu.edu/

# Participation in joint projects/calls

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

ktu institute of materials science 1922

**2019-2020 Experimental characterization of thin films and structures used in vacuum chamber for particle accelerators** **(51 kEUR in 2021)**

Project leader Prof. Sigitas Tamulevičius
(In colloboration with Dr. Mauro Taborelli, VSC Group, CERN)

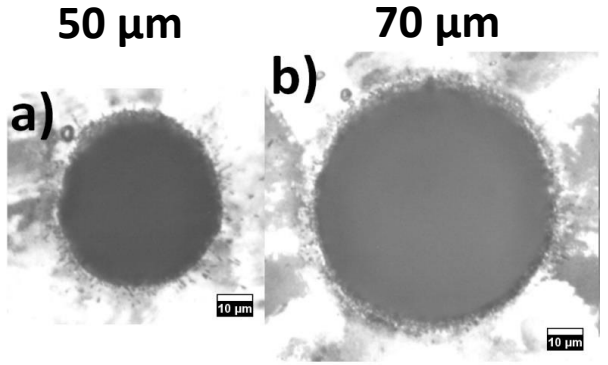
**2021 - 2022 Materials and technologies for the high-gain Fast Timing MPGD detector (FTM)**

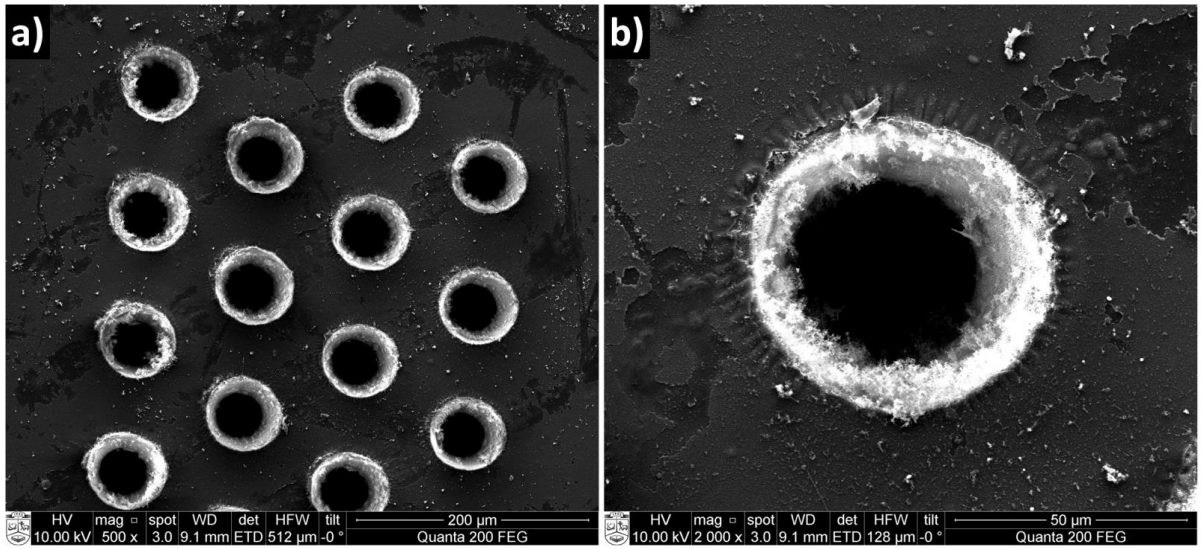
Project leader Prof. Sigitas Tamulevičius **(20 kEUR in 2021)**
(In colloboration with Dr. Piet Verwilligen, National Institute for Nuclear Physics and CERN)

# 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).

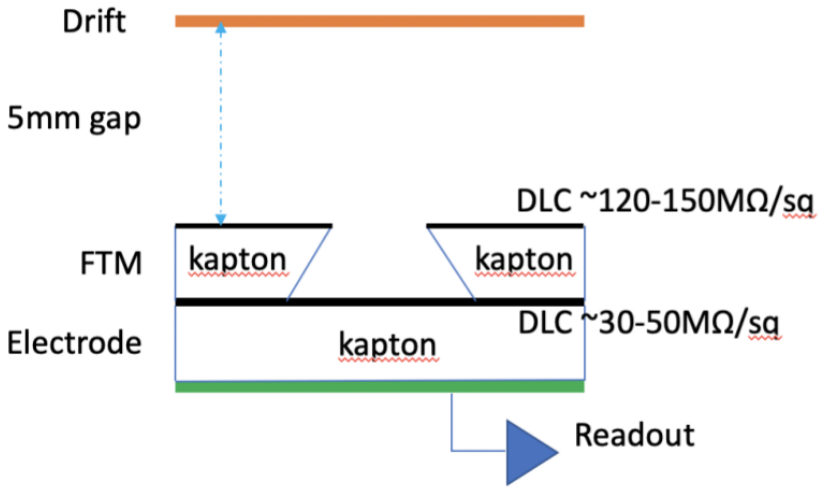
KAPTON average hole diameters:




SEM micrographs 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