

Vilnius
University

Consortium for CERN-related activities in Lithuania

Ramūnas Aleksiejūnas

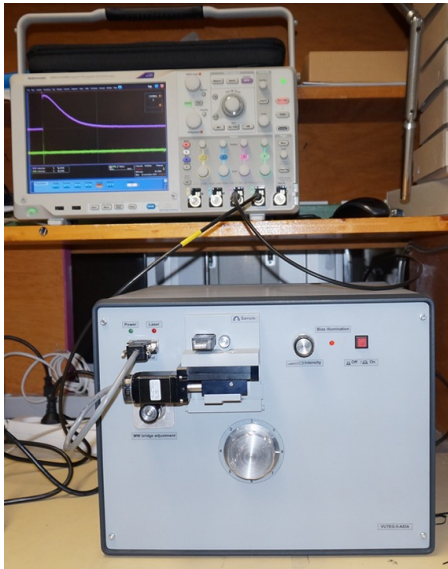


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Consortium CERN-LT

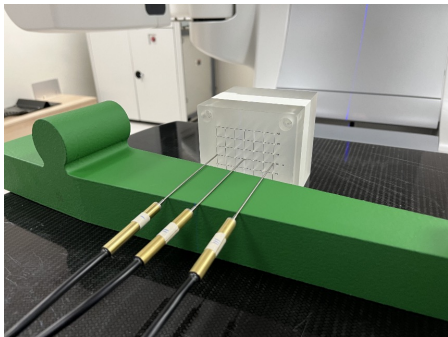


- In 2022 three universities - VU, KTU, LSMU - established a consortium CERN-LT
- The Consortium unifies the groups of scientists in Lithuania that have active collaboration with CERN
- The Consortium is open for all scientists and organizations willing to work with CERN



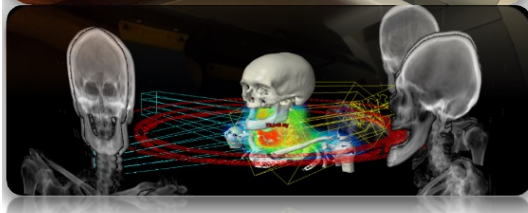
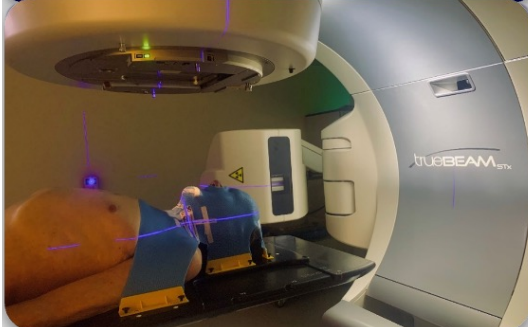
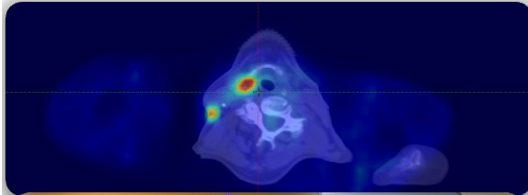
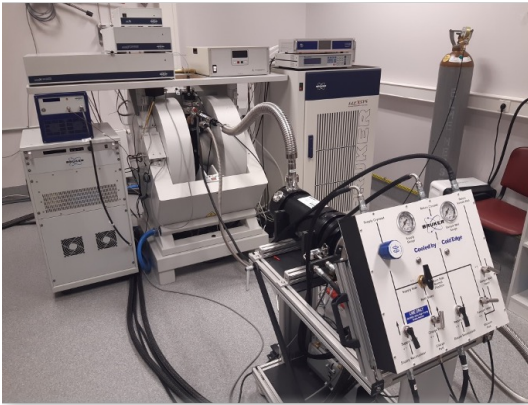
Research groups

1. IT group of detector construction and monitoring (V. Rapševičius)
2. Large energy proton collision research group (A. Juodagalvis)
3. Theoretical group of elementary particle physics (D. Jurčiukonis)
4. Radiation resilience of semiconductor detectors (T. Čeponis)
5. Group for characterization of pixel detectors (V. Rumbauskas)



Research groups

6. Scintillation detectors research group (G. Tamulaitis)
7. Ferrite materials for accelerators research group (V. Kalendra)
8. Radiobiology research group (E. Juozaitytė)
9. Group of material science institute (S. Tamulevičius)
10. Center for elementary particle and nuclear physics (A. Rinkevičius)



Structure of the Consortium

- **Research Groups (RG)** form the core of the Consortium
- 10 RGs are recognized at the moment, **8** from **VU**, **1** from **KTU**, and **1** from **LSMU**
- We estimate around 40 scientists involved in CERN-LT RGs.
- Center of Elementary Particle and Nuclear Physics (**CENTER**) is one of Consortium RGs; however, it has a dedicated funding and is entrusted with the mission to promote experimental elementary particle physics in Lithuania

Structure of the Consortium

- CERN-LT is governed by the Steering Committee, formed from RG representatives (1 per group) and two LT Government representatives (currently - 12 persons)
- **prof. Gintautas Tamulaitis** (VU) has been elected as the Chairman of the Committee
- All non-scientific Consortium activities are organized by the Administration, consisting of Executive director (prof. **Ramūnas Aleksiejūnas**), five coordinators and few administrators
- Main function of Administration is **to free RGs from non-scientific work** (procurement, event organization, coordination of activities, etc.)

Goals of the Consortium

- to unify Lithuanian scientists working in CERN-related topics and areas
- to benefit Lithuanian businesses from knowledge-spillover
- to prepare the specialists with CERN-relevant knowledge and skills
- to facilitate the interest of children and teachers in CERN activities
- to ensure the access to CERN-LT infrastructure for Lithuanian scientists
- to advertise CERN activities among the general Lithuanian population

Consortium action plan

- CERN-LT action plan is tightly bound to the “Action Plan of the associate membership of Lithuania in CERN for 2022–2027”, signed by the Minister for Education, Science, and Sport of the Republic of Lithuania on 27th October, 2022
- National Action Plan outlines the funding for CERN-related activities till 2027
- The detailed Consortium Action plan is currently under evaluation by Lithuania Research Council
- The funding becomes available for Consortium after the approval of the Plan

Main Consortium Objectives

Objective 1: to strengthen Lithuania's RDI potential in CERN-related topics

Objective 2: to develop the infrastructure required by CERN activities, including the Pixel Lab in the Center;

Objective 3: to disseminate knowledge about CERN among teachers, students, and the rest of society;

Objective 4: to ensure appropriate conditions for Lithuania's membership at CERN;

Objective 5: to facilitate the inclusion of businesses into CERN activities.

What's in the financing package I

- Annual fees of Lithuania's associate membership and CMS experiment
- Support and financing the RG of Consortium, including the Center
- Dedicated funding for the Center's "soft" expenses
- Dedicated funding for creation of Center's infrastructure (which at the moment needs to be detailed and justified; budget funding)
- Dedicated funding for VU research infrastructure (time-restricted structural funds)
- Dedicated funding for KTU and LSMU infrastructure (budget funding)

What's in the financing package II

- Mobility of scientists, administration, school teachers and students (short and long term visits to CERN, CBG events, etc.)
- Membership in networks (IPPOG and SCOAP3)
- Funds for organization of conferences, summer schools, masterclasses, seminars, etc.
- Creation of Mater study program focusing on particle physics, accelerators and detectors (EMJM program), also dedicated stipends
- Creation of dedicated on-site and remote courses (“Fotonas”) and hand-on activities for teachers and school children
- Initial funding for patenting, commercialization, project writing, ...

Main message

Lots of CERN-related activities are planned in Lithuania within the next five years and we invite Lithuanians from all around the world to become a part of them