



LHCb Vilnius Introduction

“Small Victories”



Dr. Mindaugas Šarpis



Vilnius
University

MANCHESTER
1824

The University of Manchester



LHCb
LHCb

mindaugas.sarpis@cern.ch







University
of Glasgow



VILNIUS





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ZÜRICHNER
SEIT 1386



CERN



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University



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HEIDELBERG
ZÜRICHNER
SEIT 1386





University of Glasgow



Vilnius University



UNIVERSITÄT HEIDELBERG
ZUKUNFT SEIT 1386







LHCb Vilnius



Dr. Mindaugas Šarpis

Head of the group



**Dr. Mažena Mackoit -
Sinkevičienė**

Senior Researcher



Dr. Oleg Kravcov

Software Associate



Yauheni Talochka

Software Associate



Karolina German

Intern



**Venera Viktoria
Ispiryan**

Intern

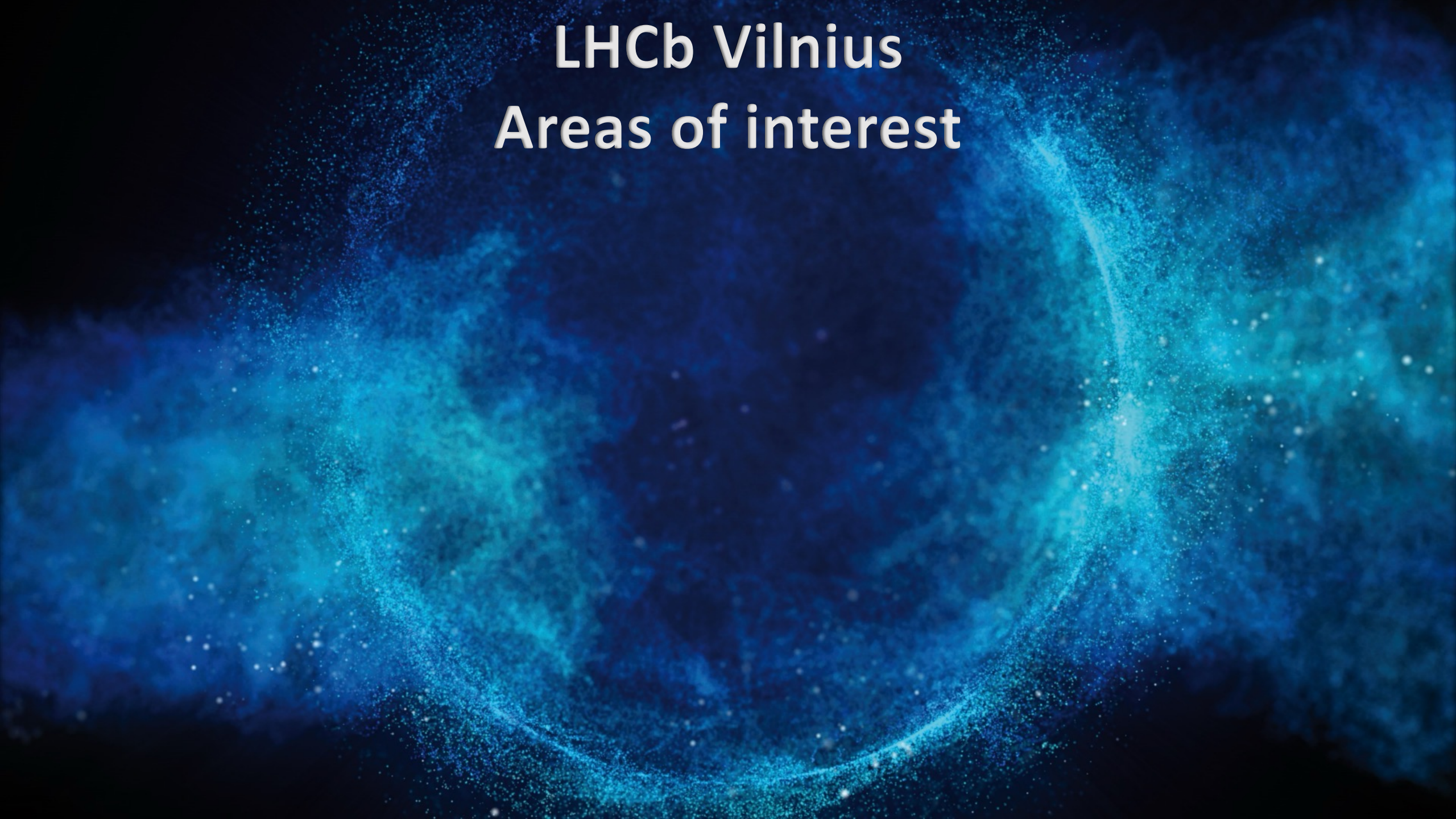


Agapi Karveli

Erasmus Intern

LHCb Vilnius

Areas of interest



The background of the slide is a dark blue field filled with numerous small, bright blue particles. These particles are arranged in several distinct, glowing circular or semi-circular tracks that appear to be spiraling or moving across the frame. The tracks are composed of many individual points of light, creating a sense of motion and depth. The overall effect is reminiscent of a particle detector or a visualization of data points in a complex system.

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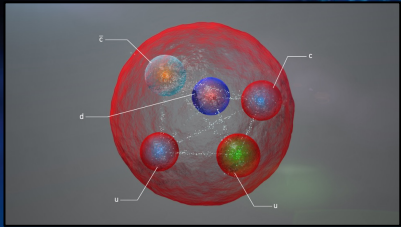
Areas of interest

Data Analysis
Exotic Hadron Spectroscopy

LHCb Vilnius

Areas of interest

Data Analysis
Exotic Hadron Spectroscopy



LHCb Vilnius

Areas of interest

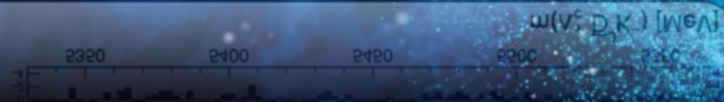
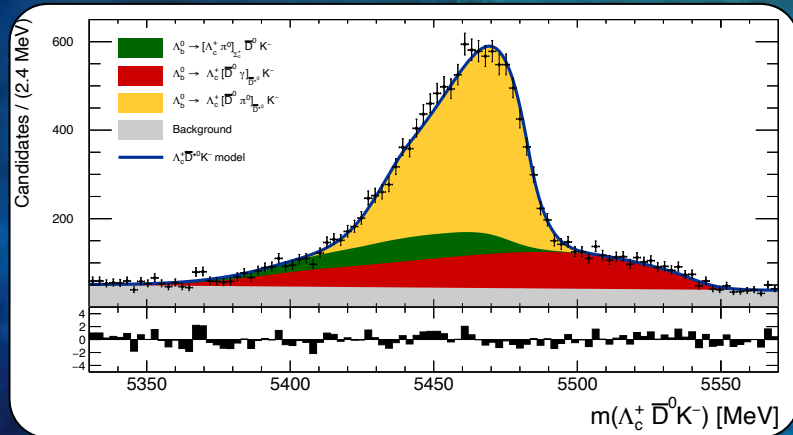
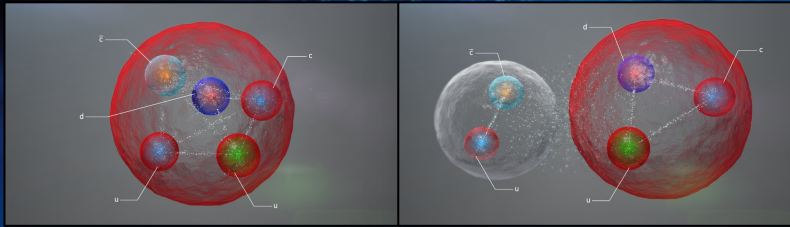
Data Analysis
Exotic Hadron Spectroscopy



LHCb Vilnius

Areas of interest

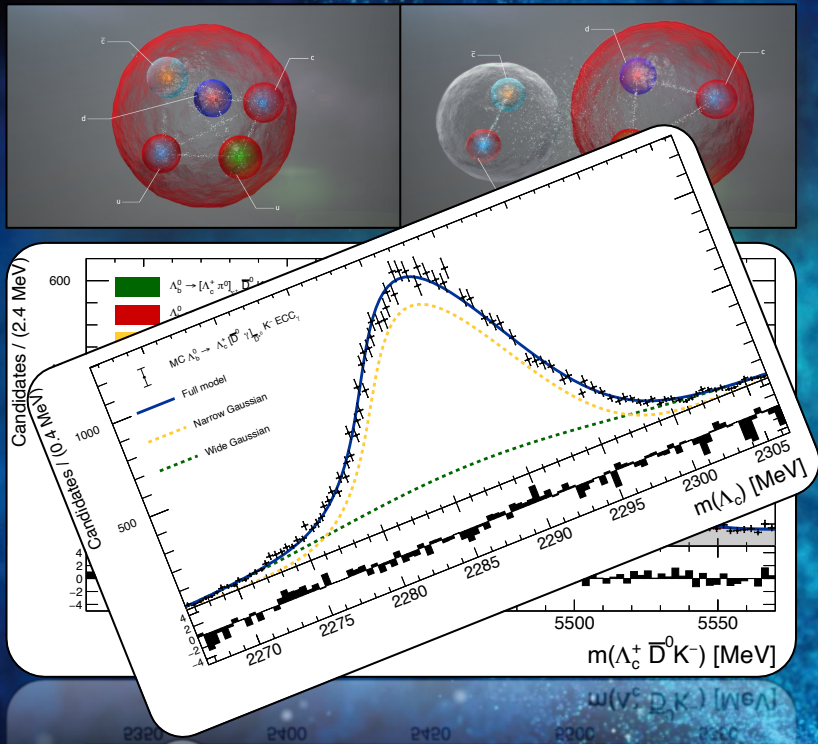
Data Analysis
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LHCb Vilnius

Areas of interest

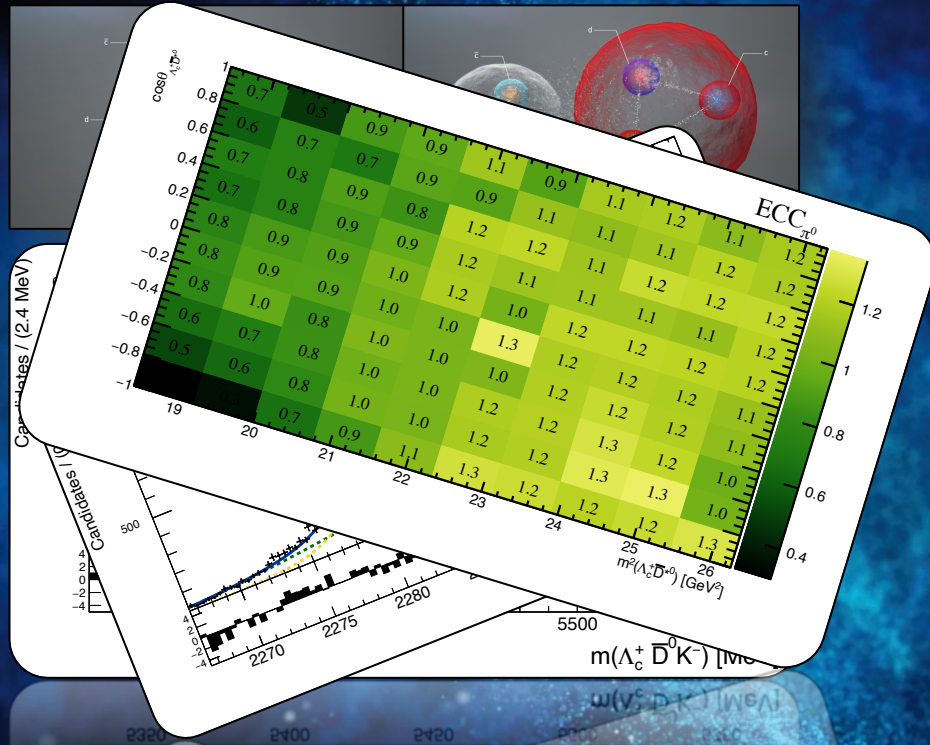
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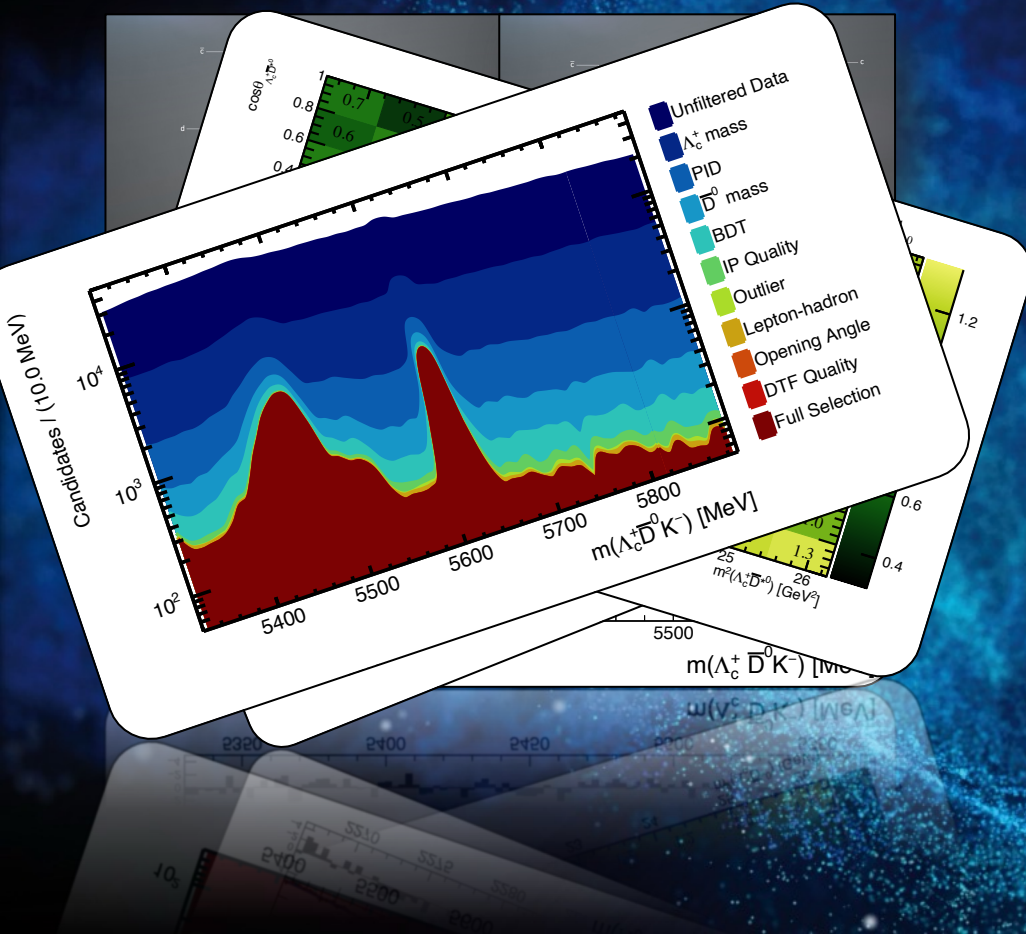
Data Analysis
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Areas of interest

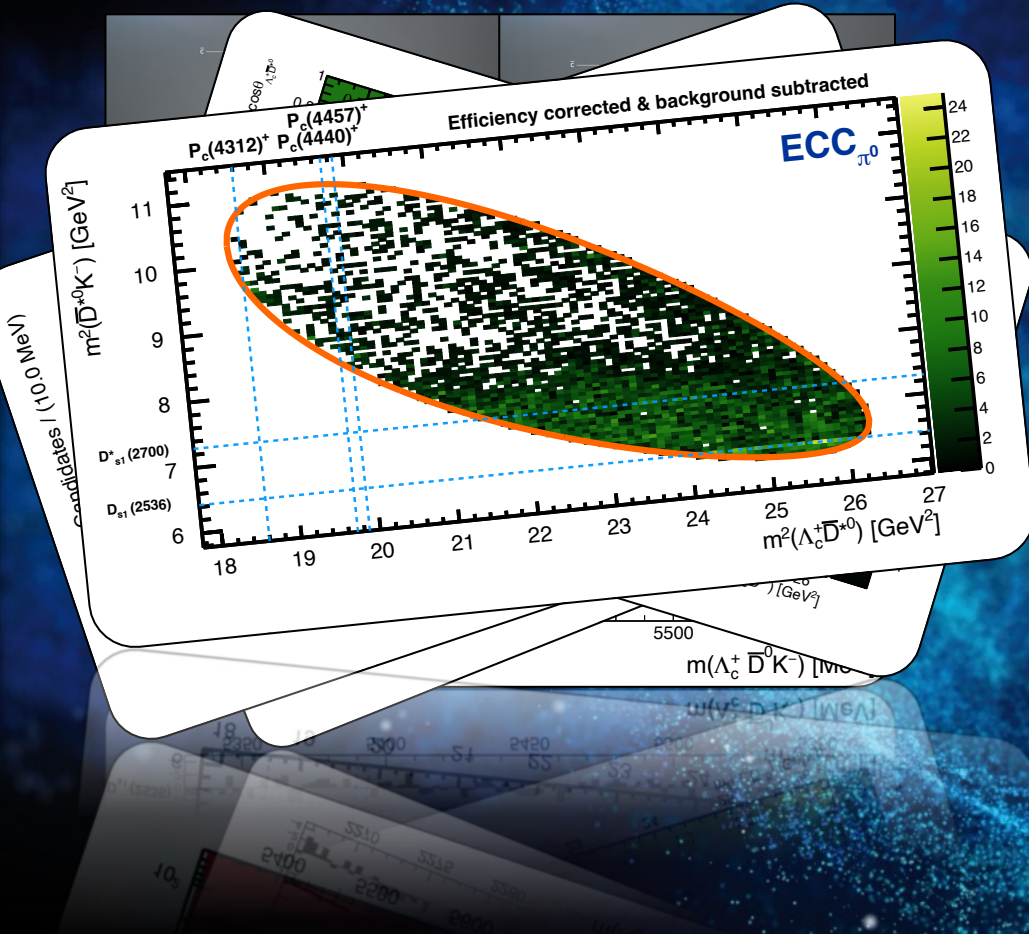
Data Analysis
Exotic Hadron Spectroscopy



LHCb Vilnius

Areas of interest

Data Analysis
Exotic Hadron Spectroscopy



LHCb Vilnius

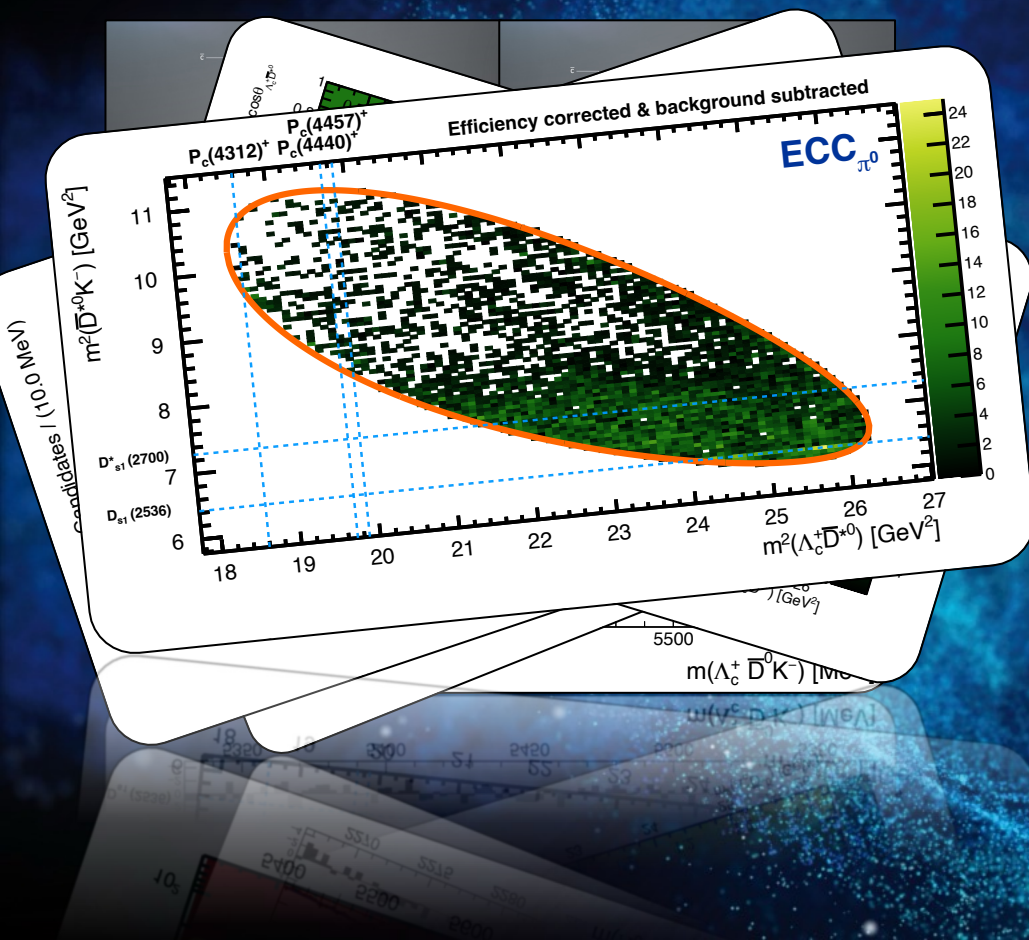
Areas of interest

Data Analysis

Exotic Hadron Spectroscopy

Software

Open Data and Reproducibility



LHCb Vilnius

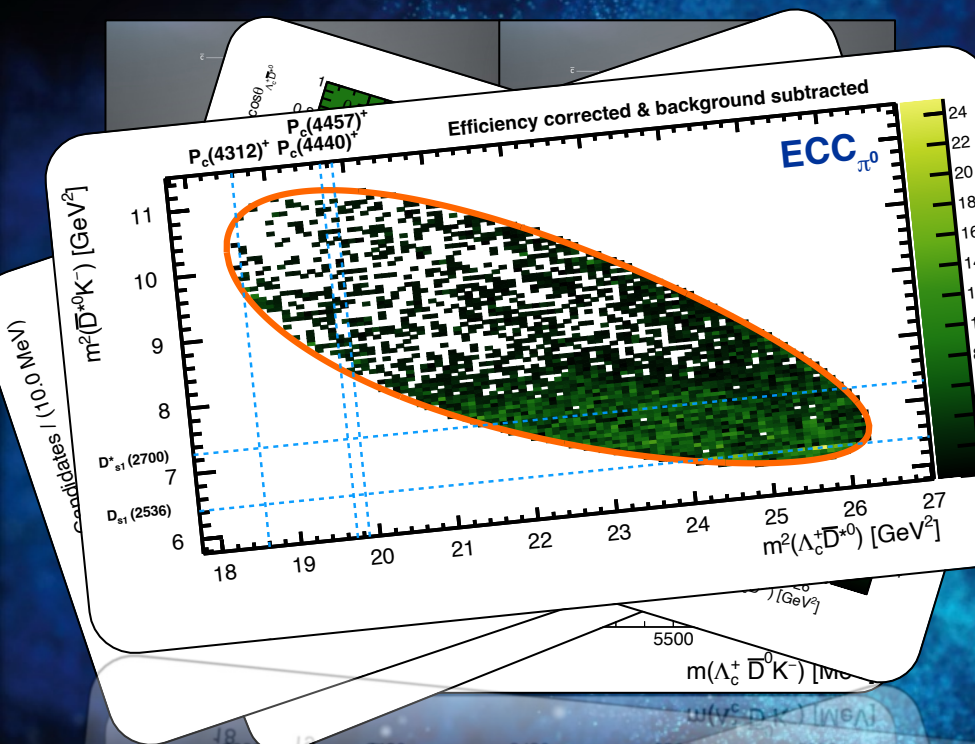
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LHCb Vilnius

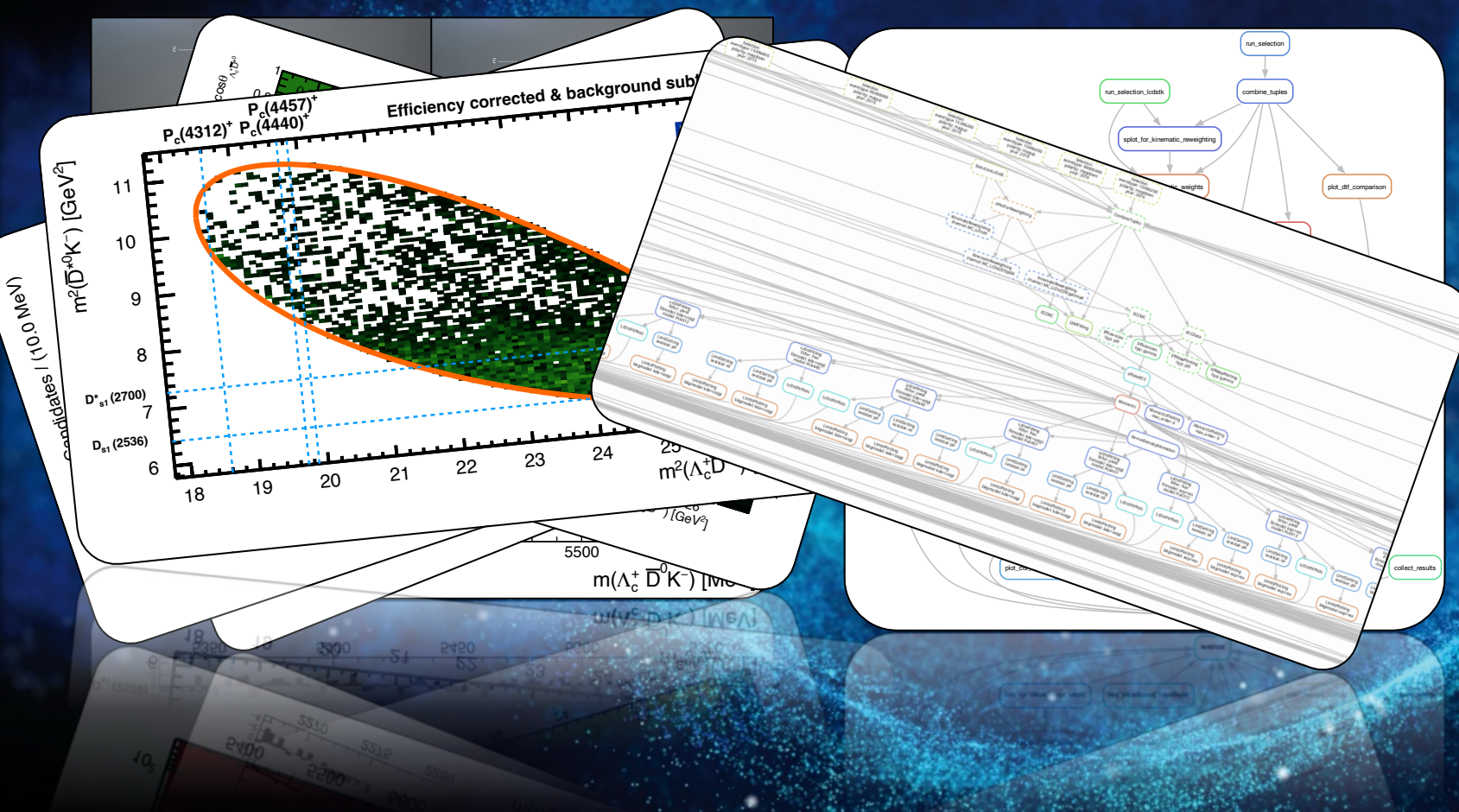
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LHCb Vilnius

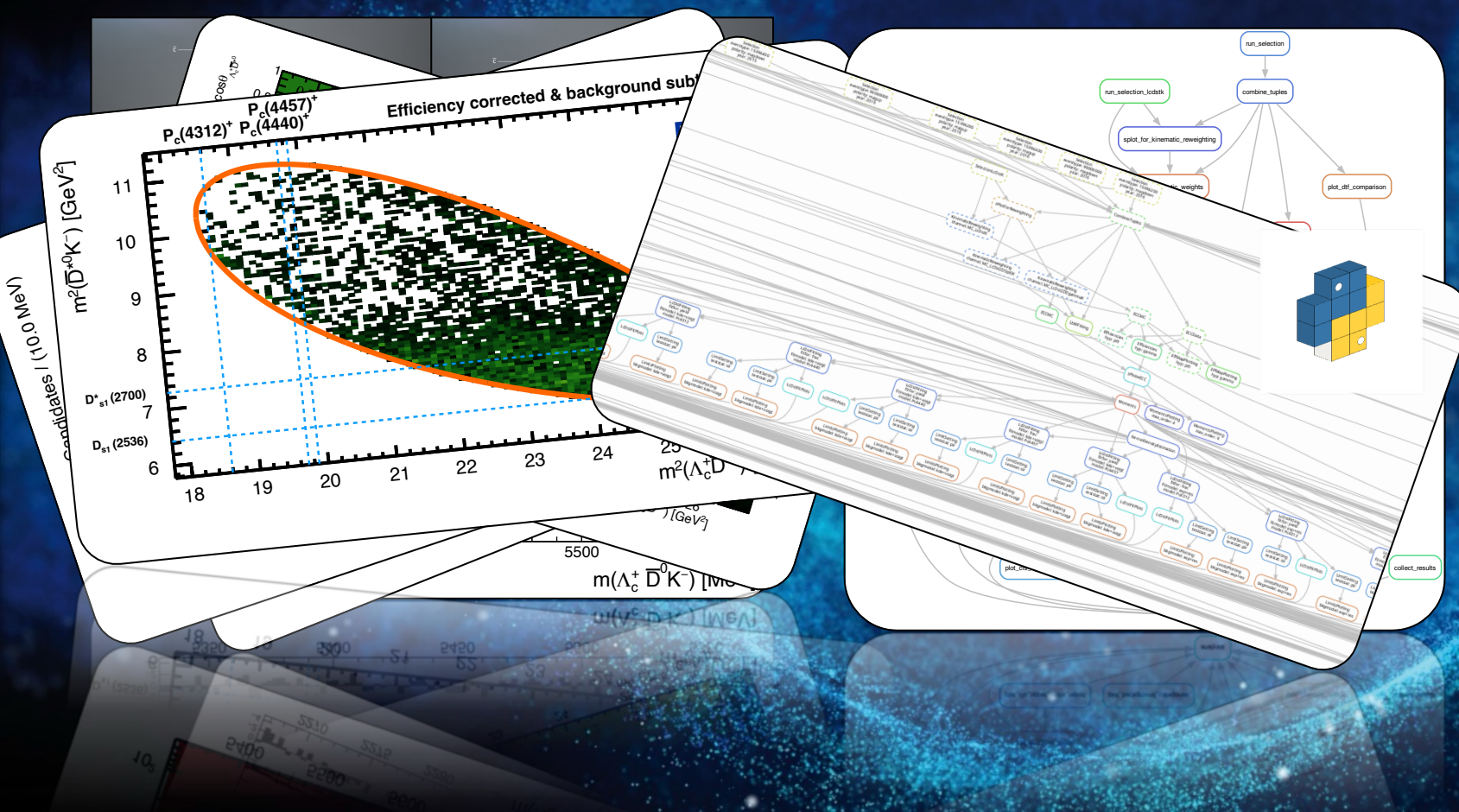
Areas of interest

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LHCb Vilnius

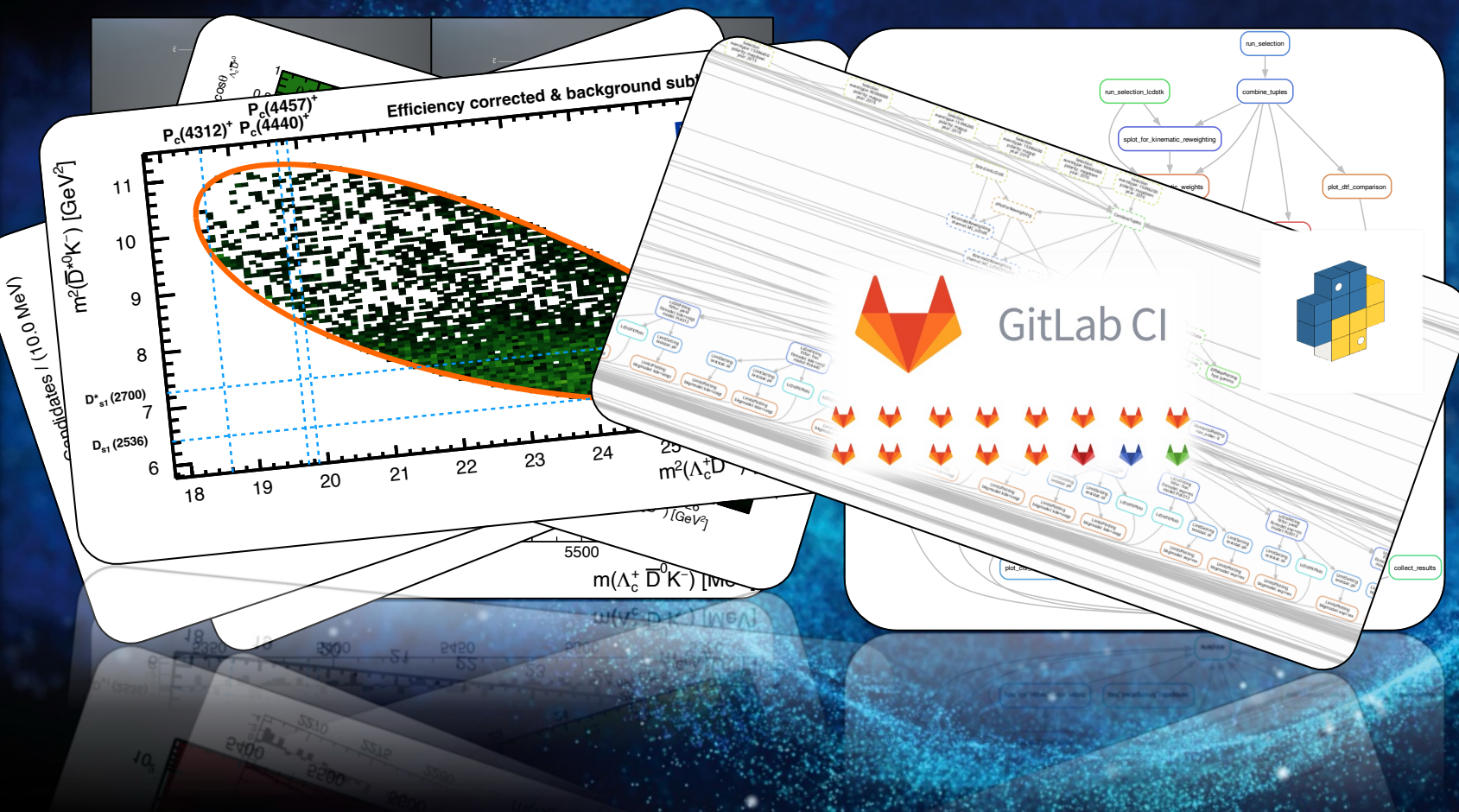
Areas of interest

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LHCb Vilnius

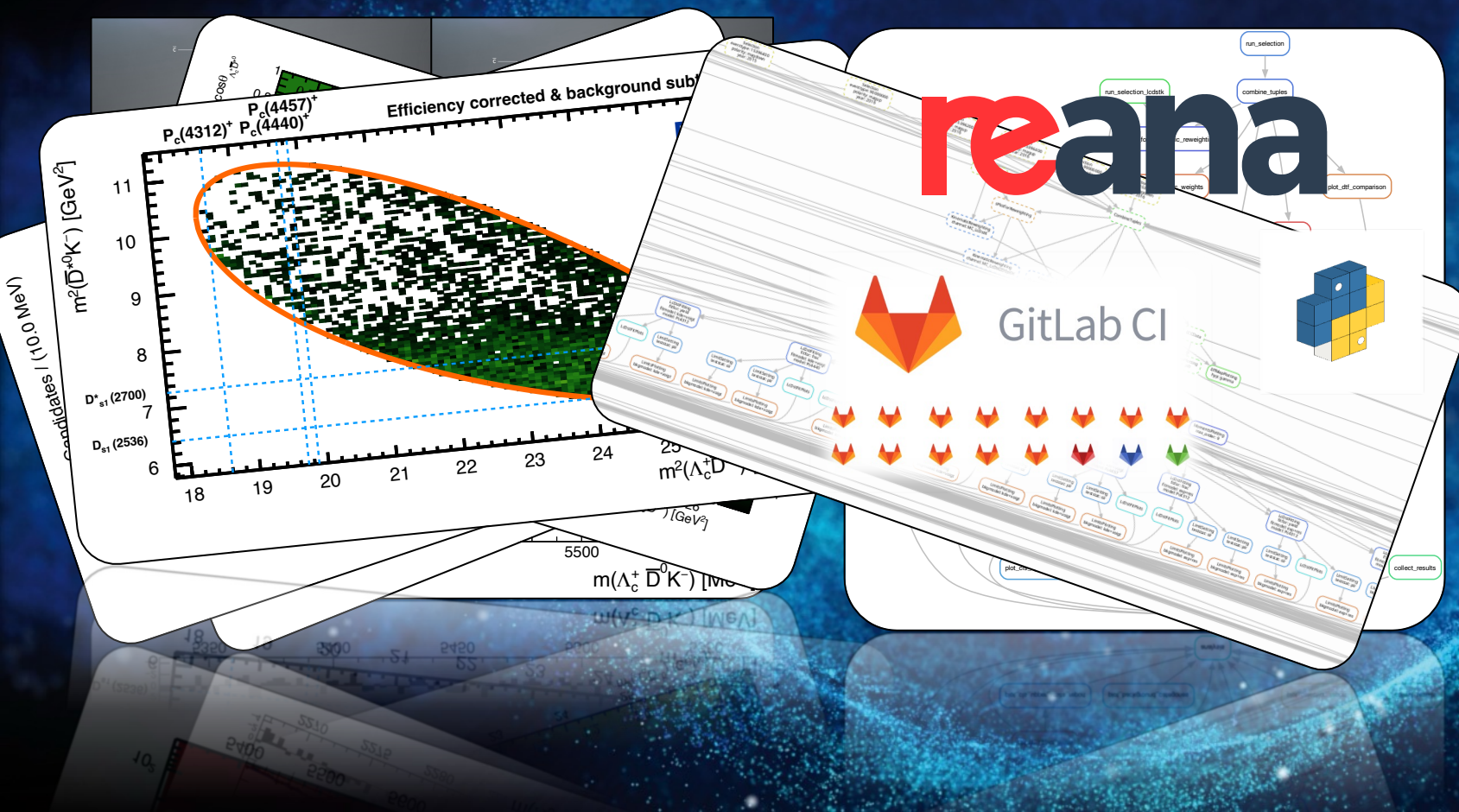
Areas of interest

Data Analysis

Exotic Hadron Spectroscopy

Software

Open Data and Reproducibility



LHCb Vilnius

Areas of interest

Data Analysis

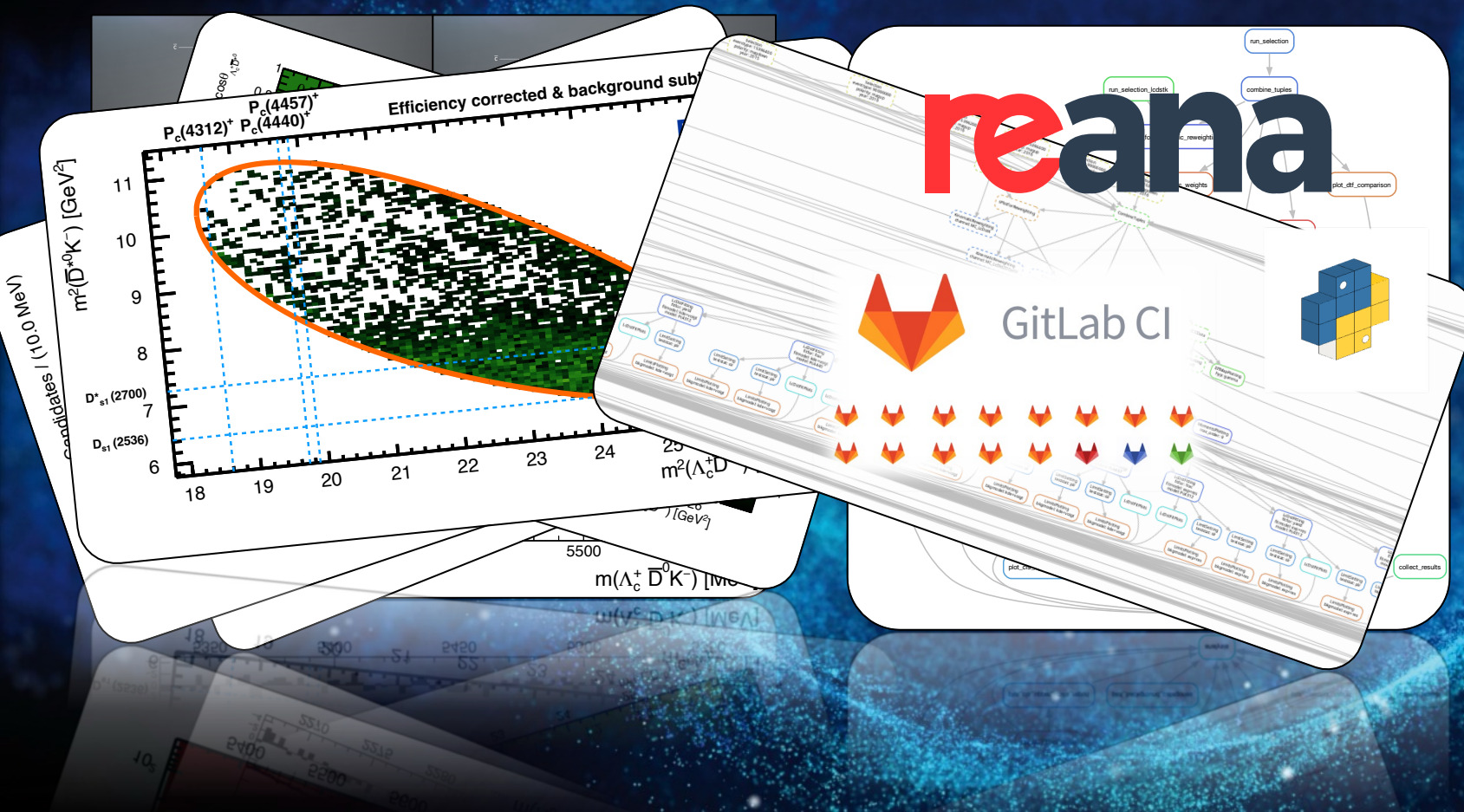
Exotic Hadron Spectroscopy

Software

Open Data and Reproducibility

Hardware

*SciFi Detector**



LHCb Vilnius

Areas of interest

Data Analysis

Exotic Hadron Spectroscopy

Software

Open Data and Reproducibility

Hardware

*SciFi Detector**





LHCb Vilnius History (in the making)



Aleksas Mazeliauskas

Vytautas Dūdenas

Brigita Abakevičiūtė

Justinas Rumbutis

Mangirdas Nenšiškis

Vilius Cepaitis

Ingrida Semeneč

Marijus Ambrozus

Dominykas Malinauskas

Aurelijus Rinkevičius

Vytautas Visiavicius

Gediminas Sarpis

Adomas Jelinskas

Henrikas Svidras

Sandra Kvedaraitė

Marita Povillaitis

Vidas Regelskis

Andrius Juodagalvis

Laura Serkonyte

Simonas Drauskas

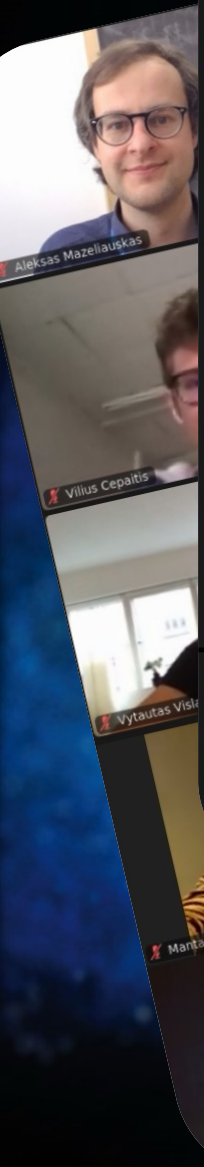
Laura Sinkunaite

Andrius Tamosiunas

Darius

Vytautas Mickus

Mindaugas Karčiauskas



Vilius Cepaitis

Aurelijus Rinkevicius

Mario Jokić

Simonas Drauksas

SMSM
LTU_Tadas Juknevičius

Edita Suziededienė

Anton Kuncinas

Vytautas Dūdenas

Gilbertas Umbrazunas

Marijus Ambrozas

Andrius Tamosiunas

Vidas Regelskis

Justinas Rumbutis

Audrius Alkauskas

Darius

Kastytis Zubovas

Thomas Gajdosik

Leonas Balasevičius

Aleksas Mazeliauskas (he/him/his)

Ingrida Semeneč (she/hers)

Vitalijus Gailius

Henrikas Svidras

Mindaugas Karčiauskas

Juozas Šulskus LT

Gediminas "G" Glemža

Mindaugas Šarpis

Laura Serkšnytė

Lithuania Vita Valiunaite

Mangirdas Neniškis

SECOND LITHUANIAN PARTICLE PHYSICS MEETING
April 11, 2022 @Zoom
One day virtual gathering of all particle physicists with connections to Lithuania. Please register at cern.ch/LPPM2022

Laura Sinkunaite

Andrius Tamosiunas

Darius

Vytautas Mickus

Mindaugas Karčiauskas

PHYSICS MEETING
SECOND LITHUANIAN PARTICLE



Vilius Cepaitis

Aurelijus Rinkevicius

Aleksas Mazeliauskas (he/him/his)

Simonas Drauskas

Nana Chychkalo

...edeliene

Aleksas Mazeliauskas

Anton Kuncinas

Vytautas Dūdenas

Ieva Radavičiūtė

Mojus Danyla

Nana Chychkalo

rimas

Gediminas Glemža

Vilius Cepaitis

Justinas Rumbutis

Audrius Alk

Benjamins Togobickij

Ramūnas Aleksiejūnas

Brigita Abakevičienė

Mindaugas Karčiauskas

Venera Viktori...

Vytautas Visi

Aleksas Mazeliauskas (he/him/his)

Ingr

Justinas Rumbutis

Deividas Ruškys (LT)

Mindaugas Sarpis

Gabija Žemait...

Venera Viktori Ispiryān

Mantas Povillaitis

Gediminas "G" Glemža

Mindaugas Sarpis

darius

Andrius Juodagalvis

Gabija Žemaitytė

Anton Kuncinas

Anton Kuncinas

...ra Sinkunaitė

Andrius Tamosiunas

Darius

Laura Serkšnytė

Ingrida Semeneč

Vytautas

Gilbertas Umbrasunas

Thomas Gajdosik

...ra Sinkunaitė

Andrius Tamosiunas

Darius

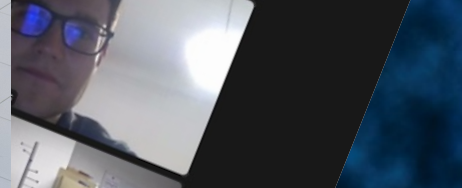
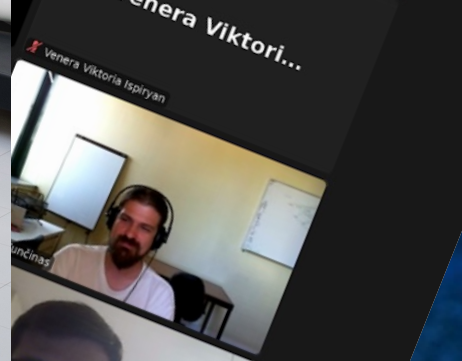
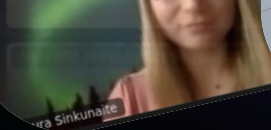
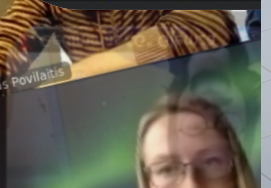
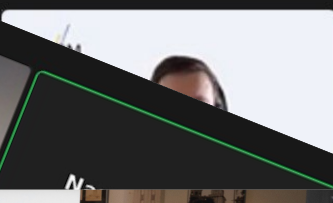
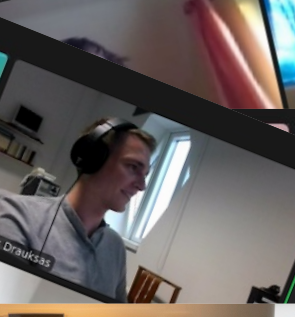
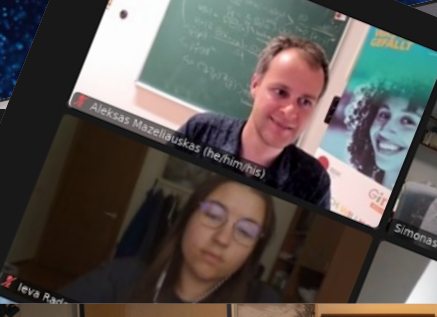
Laura Serkšnytė

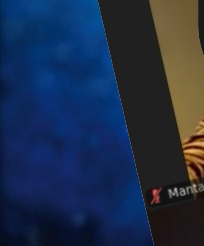
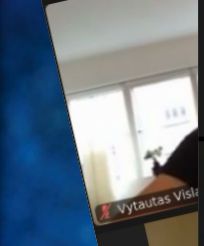
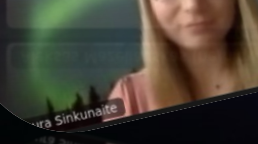
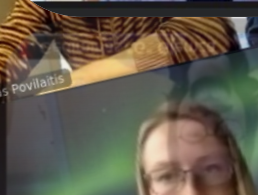
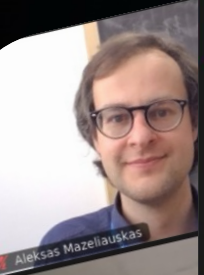
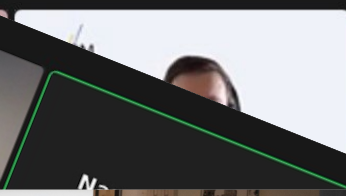
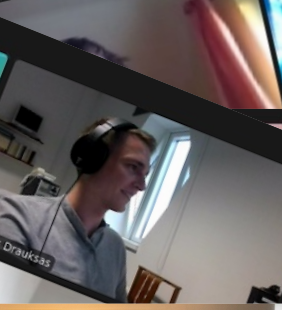
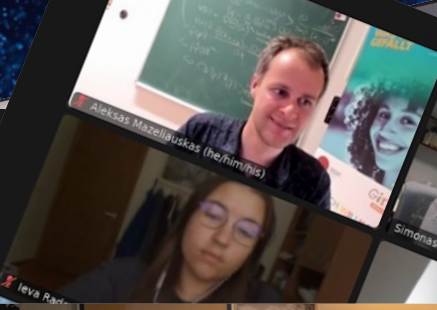
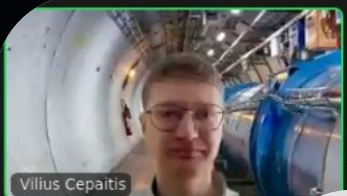
Ingrida Semeneč

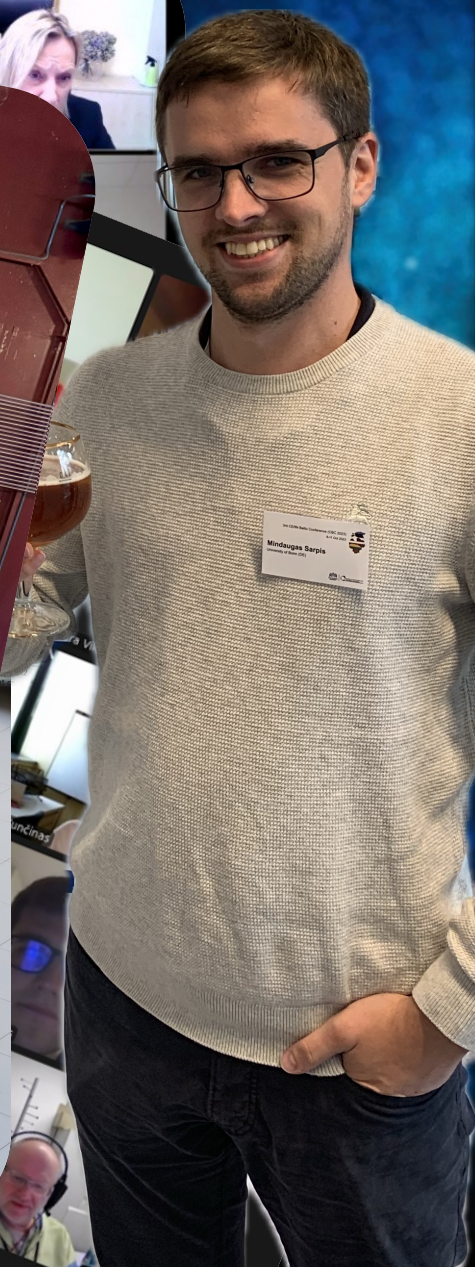
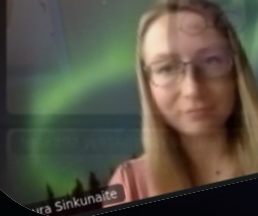
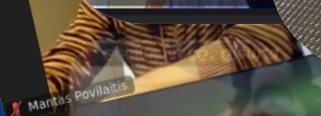
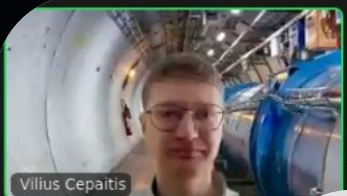
Vytautas

Gilbertas Umbrasunas

Thomas Gajdosik







LHCb Vilnius – Small Victories



LHCb Vilnius – Small Victories



LHCb Vilnius – Small Victories



Skaylink LT

February 14 · 🌐

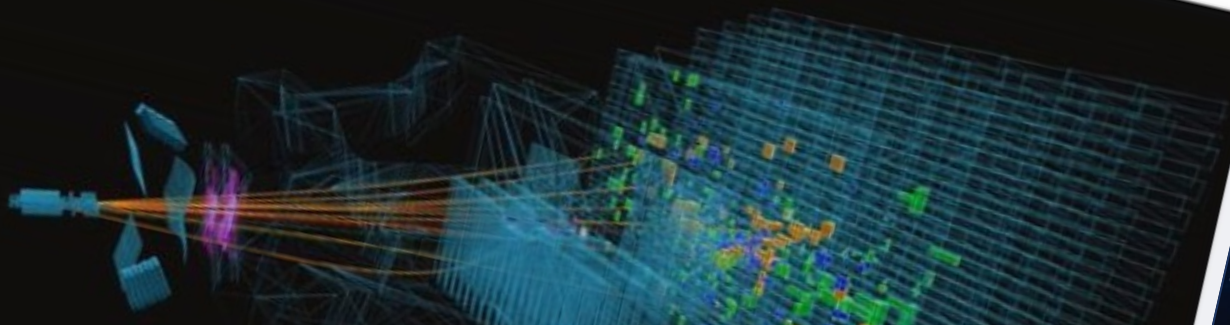
Kai maži darbai prisideda prie įspūdingos istorijos. Tai, ką Mindaugas Šarpis daro su savo Komanda, tikime, taps dar viena įspūdinga Lietuvos sėkmės istorija. Ir ačiū mūsų įrangos projektų komandai: Ervin Rizgelis, [Jonas Černauskis](#), [Karina Abromavičiūtė](#), [Aurimas Skaržauskas](#).
Didi Lietuva neatsitinka savaime!



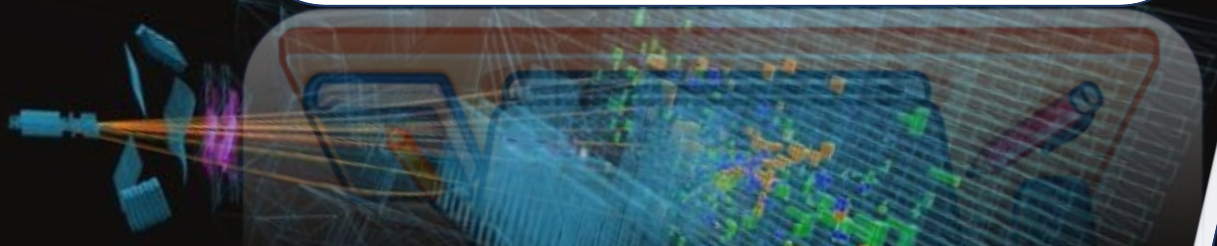
Mindaugas Šarpis

20h · 🌐

Pradedant dalelių fizikos ir CERN LHCb veiklas Lietuvoje, siekiant įkurti sėkmingą ir ilgalaikę LHCb Vilnius grupę reikia suderinti bei suorganizuoti daug dalykų vienu metu. Vienas iš jų, kuris yra labai svarbus - kompiuterinė infrastruktūra. Noriu labai padėkoti kompanijai [Skaylink LT](#), kuri mus maloniai parėmė nešiojamais kompiuteriais. Šiuos kompiuterius paversime Linux OS pagrindu veikiančiais terminalais. Grupėje dirbantys studentai ir internai galės jungtis prie CERN serverių ir atlikti dalelių fizikos duomenų analizę. Tokia parama mums ypatingai svarbi ir prasminga. Ačiū!



LHCb Vilnius – Small Victories



LHCb Vilnius – Small Victories



LHCb Vilnius – Small Victories



LHCb Vilnius – Small Victories

Seminaras



Dalelių Fizika ir LHCb Detektorius
CERN - hipermaterijos aptikimas



Saulėtekio al. 3, Vilnius
NFTMC AIOI (konferencijų salėje)



16:00 val.



Anglų kalba



Antradienį
vasario 20 d.



Dr. Gediminas Šarpis
Dalelių fizikas, dirbantis CERN

LHCb Vih... All Victories



Dalelių fizika

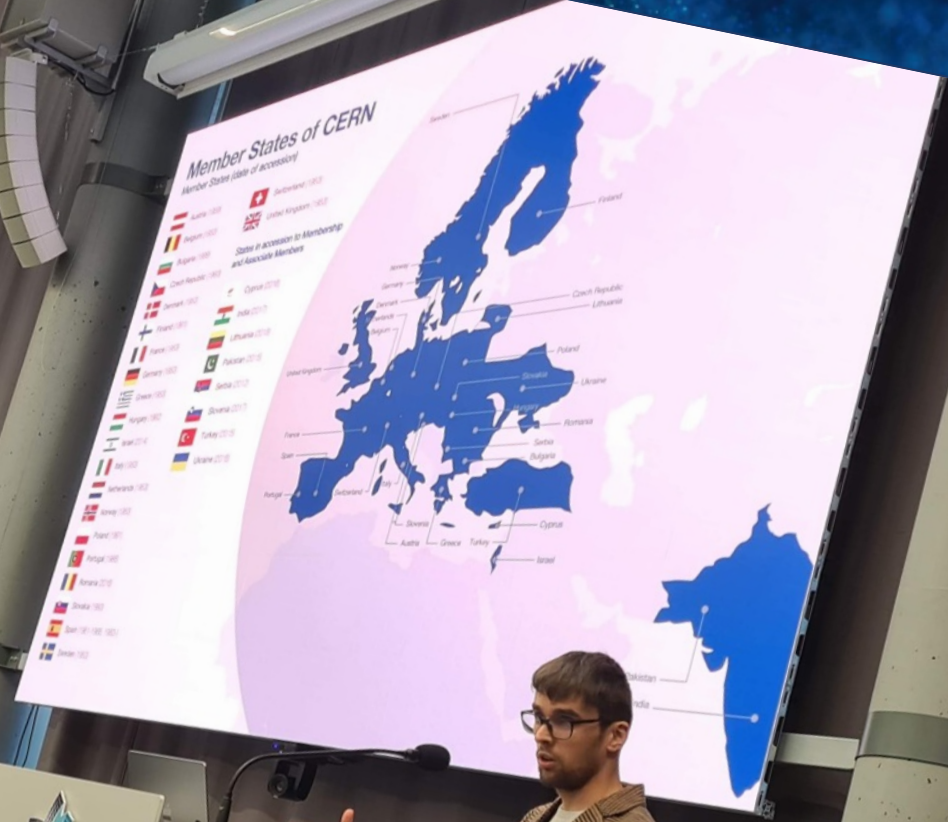
CERN

... CERN ...
... 2012 ...

LHCb Villages All Victories



Member States of CERN



LH

70 Victories



LH

II Victories



LHCb Vilnius – Small Victories



LHCb Vilnius – Small Victories



LHCb Vilnius – Small Victories



LHCb Vilnius – Small Victories



LHCb Vilnius – Small Victories

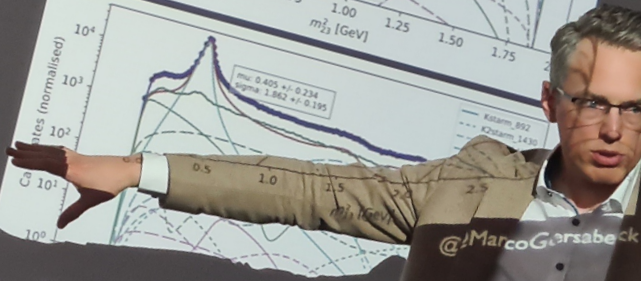
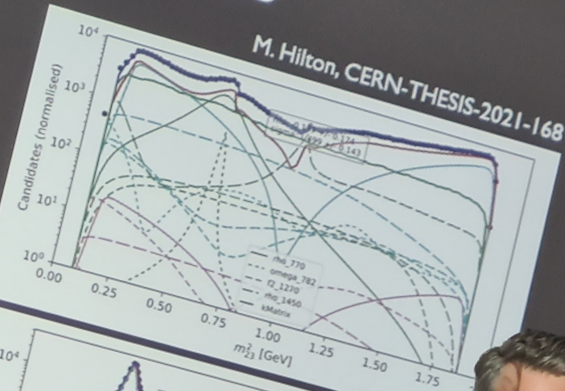
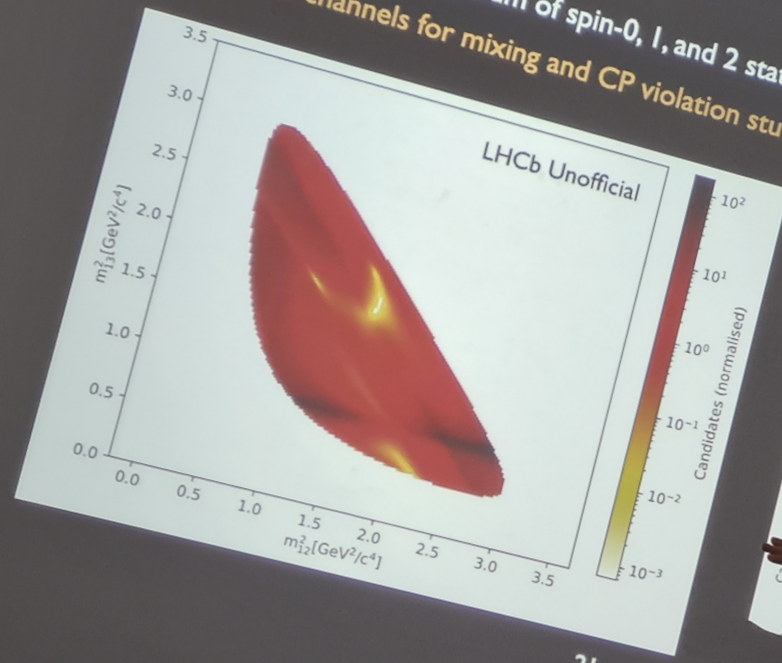




Lithuanian Consortium for Particle
Physics
Ramūnas Aleksiejūnas

Multi-body final states

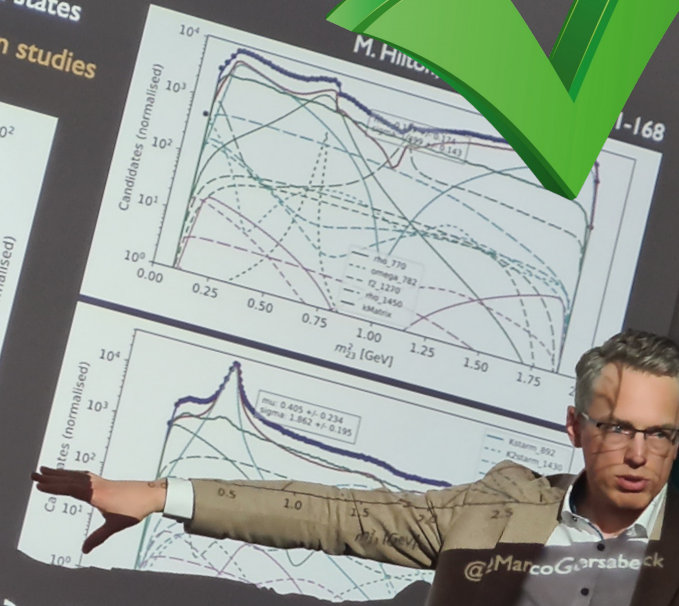
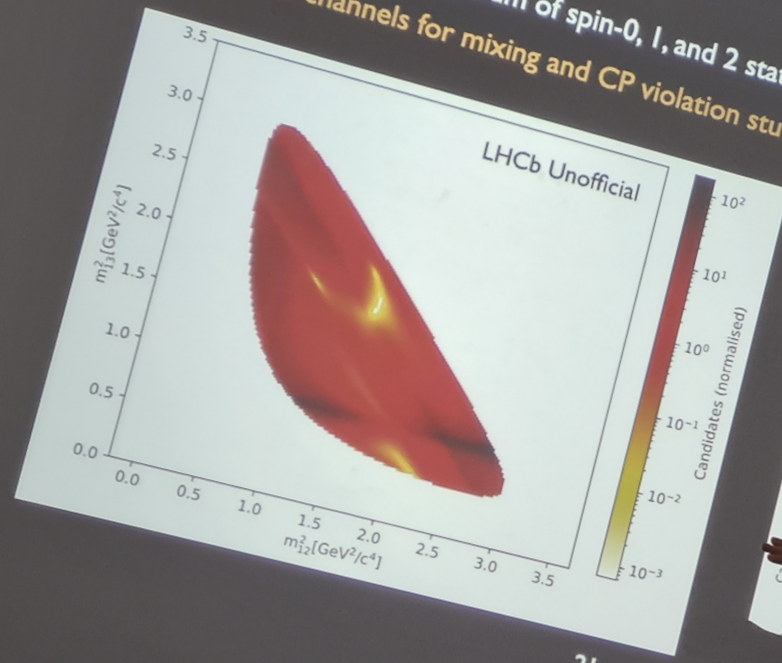
- Rich interference spectrum of spin-0, 1, and 2 states
 - ➔ Superb channels for mixing and CP violation studies



@MarcoGersabeck

Multi-body final states

- Rich interference spectrum of spin-0, 1, and 2 states
- ➔ Superb channels for mixing and CP violation studies



LHCb Vilnius – Small Victories



LHCb Vilnius – Small Victories

Number of Lithuanian Members in LHCb grows
from 2 to 7

LHCb Vilnius – Small Victories

Number of Lithuanian Members in LHCb grows
from 2 to 7

As a nice gesture, Manchester is covering my
users fee for 2 years

LHCb Vilnius – Small Victories

Number of Lithuanian Members in LHCb grows
from 2 to 7

As a nice gesture, Manchester is covering my
users fee for 2 years



LHCb Vilnius – Small Victories



LHCb Vilnius – Small Victories

Spokesperson of LHCb 2020-2023 Chris Parkes
agrees to come to Lithuania and consult on
developing CERN and LHCb activities

LHCb Vilnius – Small Victories



LHCb Vilnius – Small Victories



LHCb Vilnius – Small Victories



LHCb Vilnius – Small Victories



LHC

Small victories



LHC

Small video

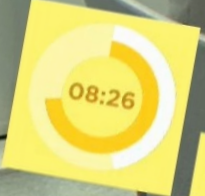
LRT TV



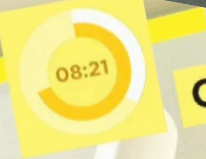
08:21

CERN MOKSLININKAS: LIETUVA DARO DAUG





CERN MOKSLININKAS: LIETUVA DARO DAUG



CERN MOKSLININKAS



LRT TV

LRT TV

Small video

LRT TV

250 000 Lithuanian People hear about CERN and LHCb Vilnius ...

LRT TV

08:26

CERN MOKSLININKAS: LIETUVA DARO DAUG

08:21

CERN MOKSLININKAS: LIETUVA DARO DAUG

Small video

LRT TV

250 000 Lithuanian People hear about CERN and LHCb Vilnius ...

LRT TV

08:26

CERN MOKSLININKAS: LIETUVA DARO DAUG

08:21

CERN MOKSLININKAS: LIETUVA DARO DAUG



LHCb Vilnius – Small Victories



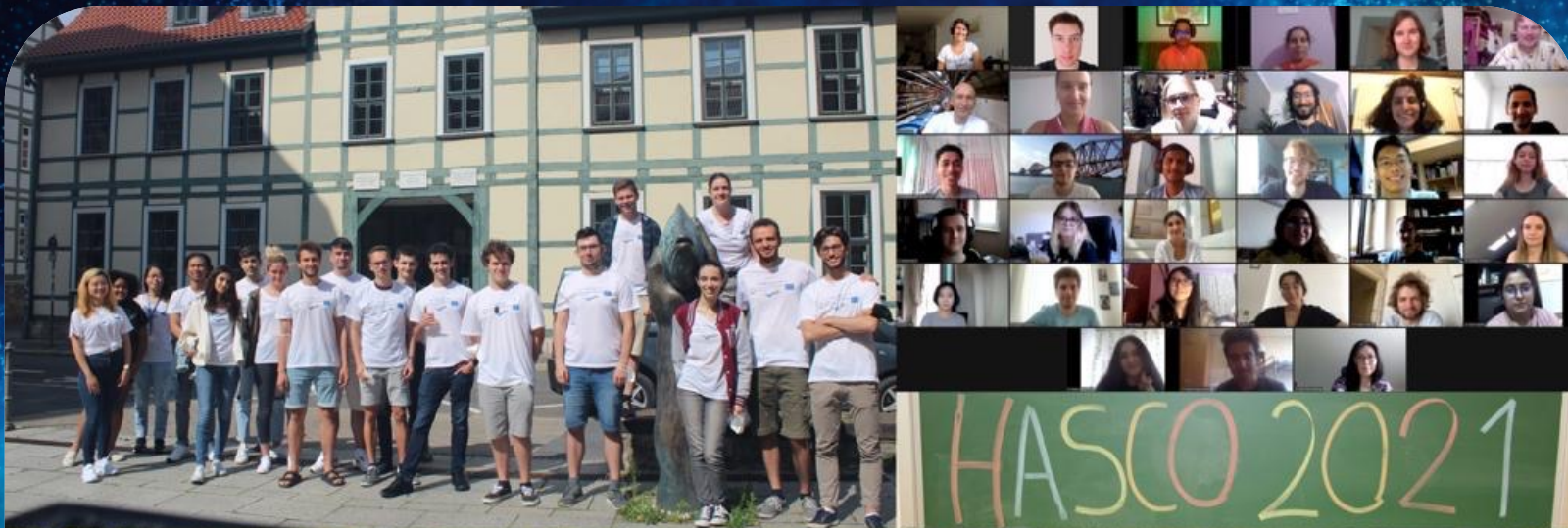
LHCb Vilnius – Small Victories



LHCb Vilnius – Small Victories



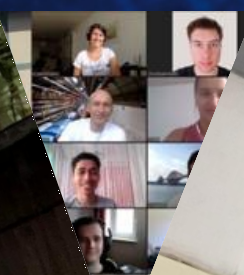
LHCb Vilnius – Small Victories



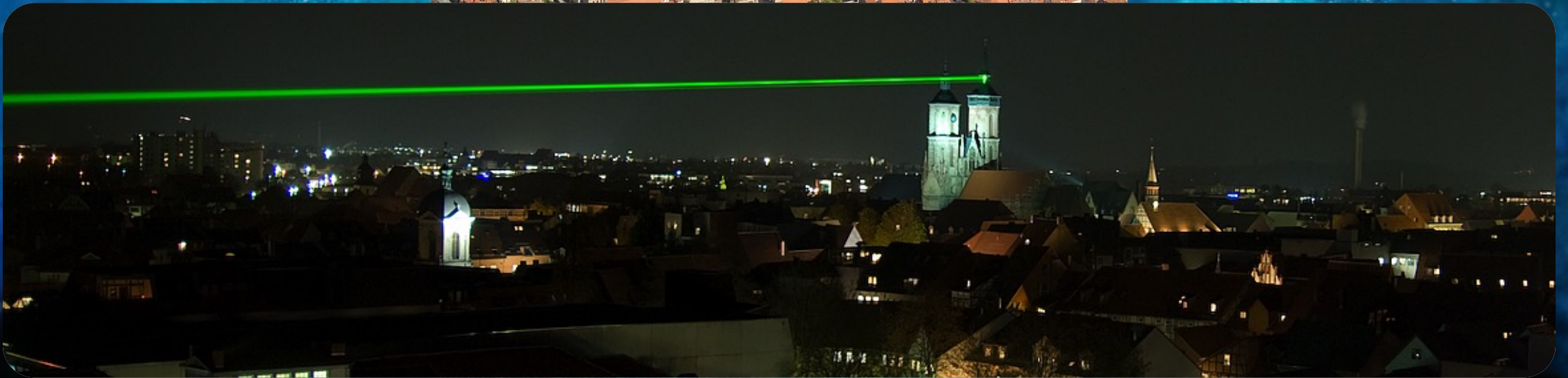
LHCb Vilnius – Small Victories



LHCb Vilnius – Small Visits



LHCb Vilnius – Small Victories

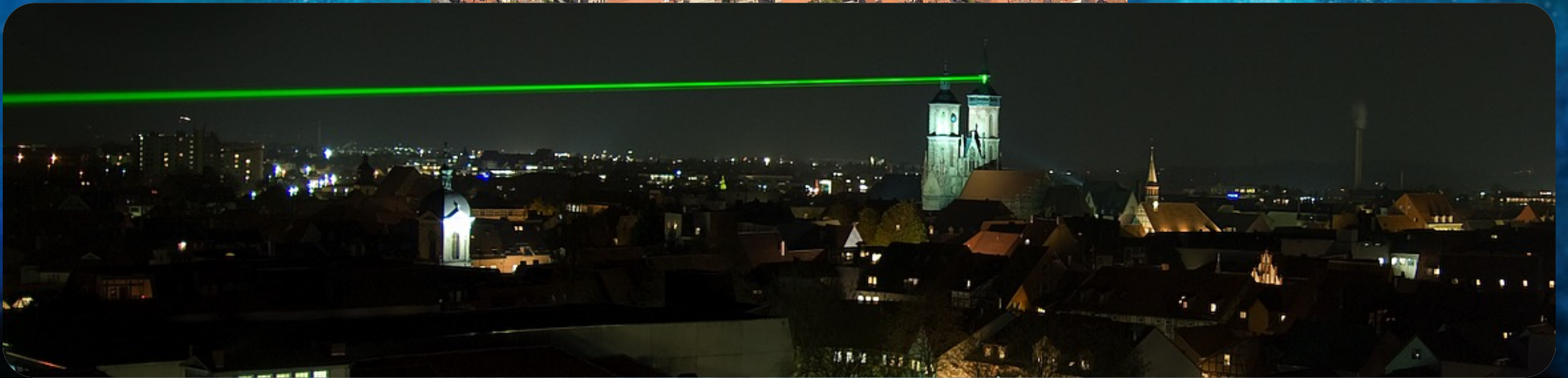


LHCb Vilnius – Small Victories



Karolina German

Intern



LHCb Vilnius – Small Victories

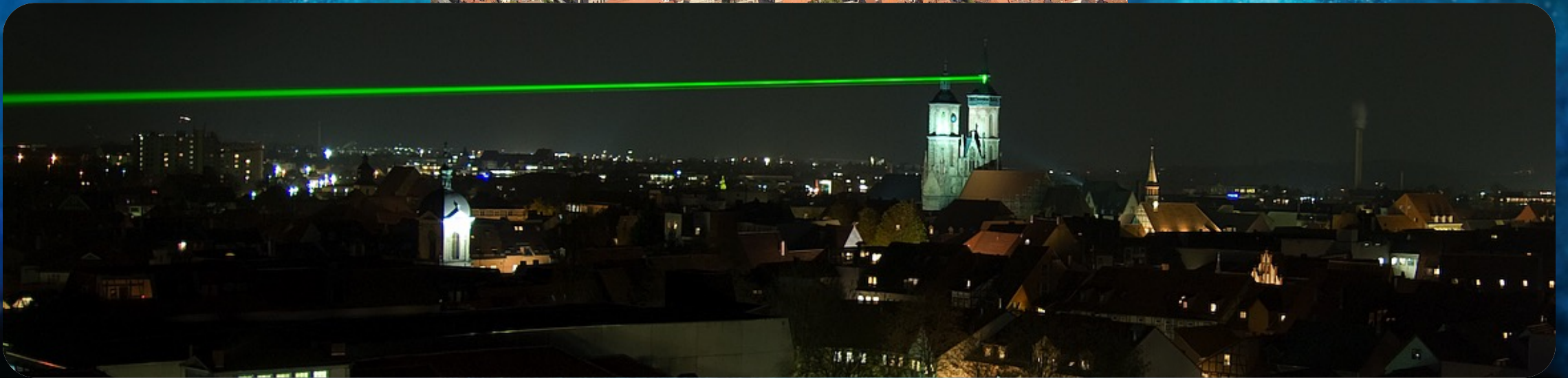


Karolina German

Intern



HASCO
2024



LHCb Vilnius – Small Victories



Karolina German

Intern



HASCO
2024



LHCb Vilnius Outlook

The background of the slide is a dark blue field filled with numerous small, bright blue particles. These particles are arranged in several concentric, glowing arcs that resemble particle tracks or detector components. The overall effect is a dynamic, futuristic, and scientific aesthetic.

LHCb Vilnius Outlook

- **Establish a process for student onboarding**

LHCb Vilnius Outlook

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- Open channels for CERN (LHCb, CMS) and business endeavors