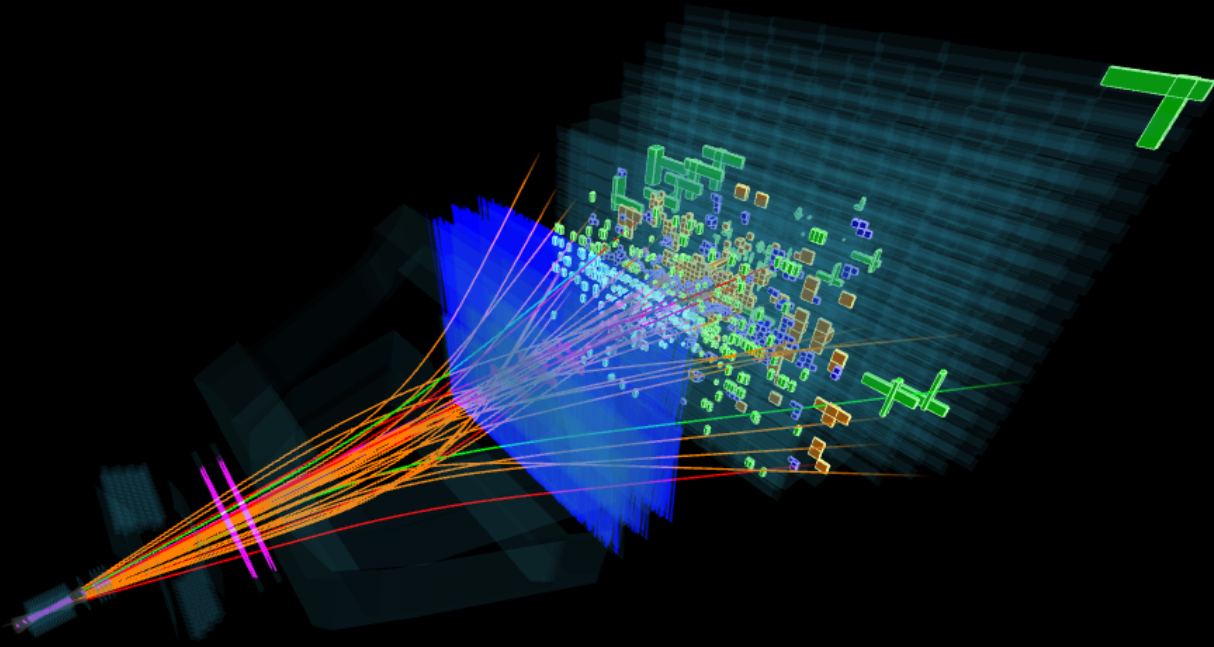




Event 158826354
Run 206854
Sat, 28 Apr 2018 21:48:17



LHCb-PISA

Preventivo locale 2022

Giovanni Punzi

29/6/2021

- **First observation** of $D^0 - \bar{D}^0$ mass difference
- Further evidence for LFV in rare B decays.
- 100th LHCb week and 1000+ collaborators
- Commissioning new detector for Run-3 next year
- Preparing FTDR for Upgrade-II ($L > 10^{34}$)
- Outreach: From MasterClasses to SuperQuark

PISA activities

1) Analisi Fisica del Charm

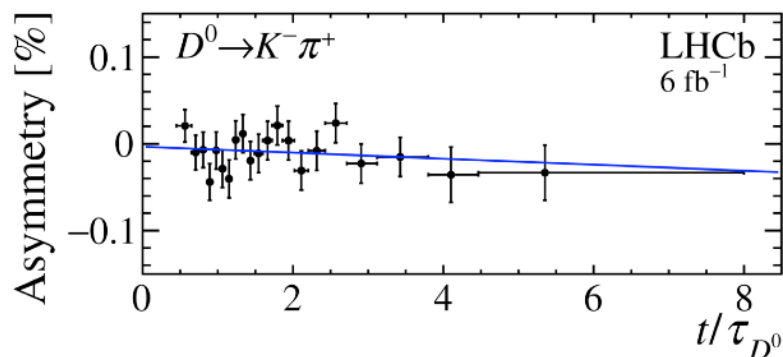
- Indirect-CPV: world's best measurement of A_Γ (tesi Pajero)
- Direct-CPV: world's best measurement of $D^0 \rightarrow K_S^0 K_S^0$ (tesi Tuci)

2) Trigger: Pisa the *largest italian contribution* to the new RealTimeAnalysis project

- FPGA tracking at Level-0 (30 MHz throughput) - prototipo finanziato da CSN1

3) Rare decays: publication of milestone Bs/Bd- $\rightarrow\mu\mu$ result

4) Leadership of Fast Simulation efforts, contribute to birth of 'Simulation Project'



Anagrafica gruppo LHCb-Pisa

Bassi	Giovanni	1	0	0	1	100	100	dott	
Bedeschi	Franco	1	0	1	1	55	55	staff	Dir Ric
Fantechi	Riccardo	1	0	0	0	30	30	staff	I Ric
Lazzari	Federico	1	0	0	1	100	100	dott	
Lusiani	Alberto	1	0	1	1	30	30	staff	Ric SNS
Morello	Michael Joseph	1	0	1	1	100	100	staff	PA SNS
Nico	Klejine	1	0	0	1	100	100	dott	
Pica	Lorenzo	1	0	0	1	100	100	dott	
Punzi	Giovanni	1	0	1	1	90	90	staff	PO
Rama	Matteo	1	0	1	1	100	100	staff	Ric INFN
Ribatti	Roberto	1	0	1	1	100	100	dott	
Walsh	John	1	0	1	1	100	100	staff	I Ric
		12	0	7	11	10.05	0	10.1	

Testbed Operations Manager

Charm physics convener

Coprocessor Testbed Coord.

Rare decays convener

Charm WG simulation liaison

+ 2 laureandi magistrali:

- Francesco Terzuoli
- Marco Sticchi

Responsabilita': presenza simultanea di 2 physics conveners nella stessa istituzione
 circostanza 'eccezionale' per LHCb

Richieste alla Sezione

- Essenziale disponibilita' laboratorio FPGA/trigger (trasloco appena completato)
 - 1) Importante responsabilita' Run-3:
Hit-finding in Real Time in the VELO
 - 2) R&D FPGA tracking demo:
Parasitical track-finding in Run-3
-> intensa attivita' commissioning ~1.5 y
 - 3) Progetto Downstream-Tracker Run-4
Led by Pisa, horizon ~2030
- Adeguati spazi ufficio

