

# FERMICLUB — From Vigo



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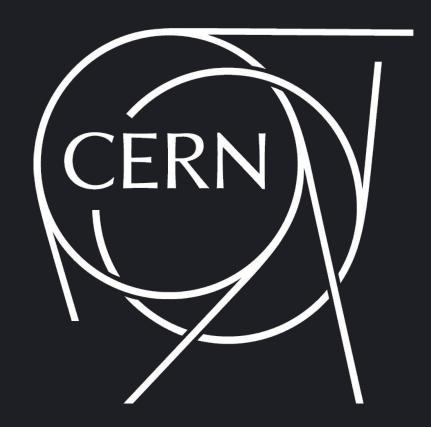
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### 01.SPAIN



















#### 1. Vigo and Galicia



























02.

THE

FERMI CLUB









- Elementary Particles
- Cosmology
- Physics olympics
- CERN BL4S



### ENRICO FERMI PHYSICS CLUB

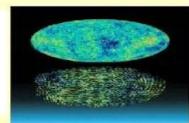
(Since 1990 - 2022)

#### Theoretical and practical sessions on:









FOR MORE INFORMATION, CONTACT WITH THE CLUB USING EMAIL: fermiclubgmail.com







#### BL4S 2018 : SHORTLISTED!!!

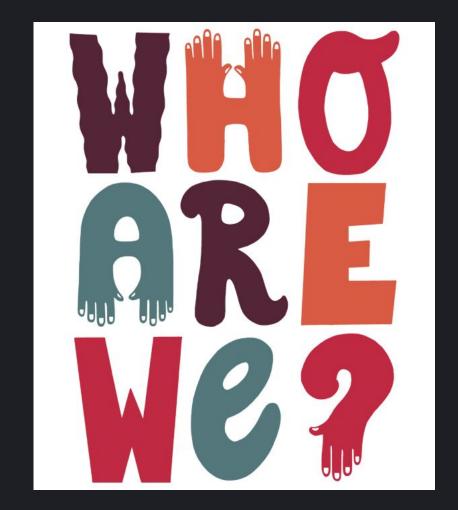








03.







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# 03. PARTICIPANTS

Name: Melanie Martins Portela Age: 17 Origin: Galicia, Spain

Studies: High School Hobbies: Fashion, poetry and music







### 03. PARTICIPANTS

Name: Iago Campos Mougán Age: 18 Origin: Galicia, Spain

Studies: Physics at USC Hobbies: Books and series of science fiction







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### 03. PARTICIPANTS

Name: Sergei Mitcek Age: 16 Origin: Samara, R<u>ussia</u>

Studies: High School Hobbies: Informatic, surfing and chill moments.









Name: Victoria Da Silva Bembibre Age: 16 Birthplace: Galicia, Spain

Studies: International Baccalaureate
Hobbies: Swimming and dancing









Name: Diego Pérez Comesaña

Age: 18

Origin: Galicia, Spain

Studies: Chemistry at UVigo Hobbies: Football and Guitar









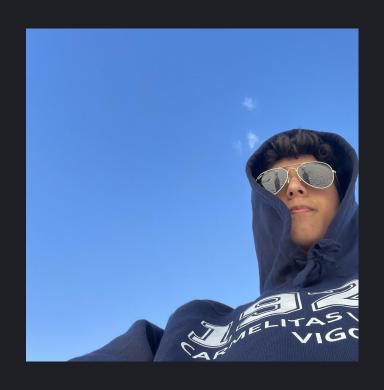
Name: Miguel Alejandro Torres Sequera

Age: 17

Origin: Caracas, Venezuela

Studies: Chemistry at USC

Hobbies: Sports, singing and dancing









Name: Martín Bar Vieito Age: 17 Origin: Galicia, Spain

Studies: High School Hobbies: Playing handball and the guitar





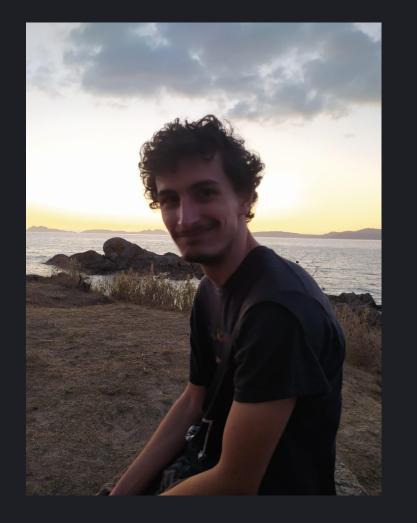


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### 03. PARTICIPANTS

Name: Martín Zamora Rodríguez Age: 17 Birthplace: Galicia, Spain

Studies: Chemistry at UVigo Hobbies: Listening to music and hiking









Name: Yago Radziunas Salinas

Age- 22

Birthplace: Barcelona, Spain

Studies: Physics Master at USC Hobbies: Playing tennis







### 03. PARTICIPANTS

Name: Juan Garzon (Hans)

Age: 71

Birthplace: Madrid, Spain

Studying: Retired Physicist Hobbies: Travelling and reading



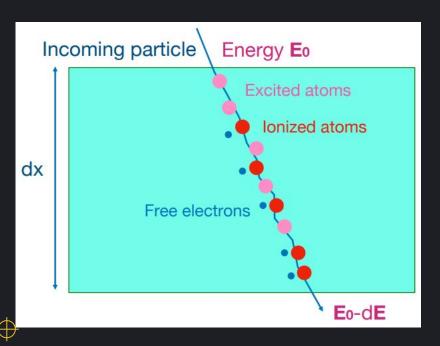


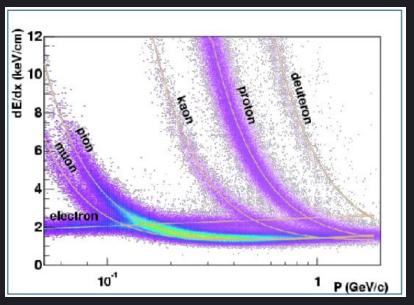


#### **Experimental precedents**

A charged particle crossing the matter **losses** part of its energy by both:

- atom excitation
- atom ionization





Specific energy loss (dE/dx) as a function of the momentum for different particles

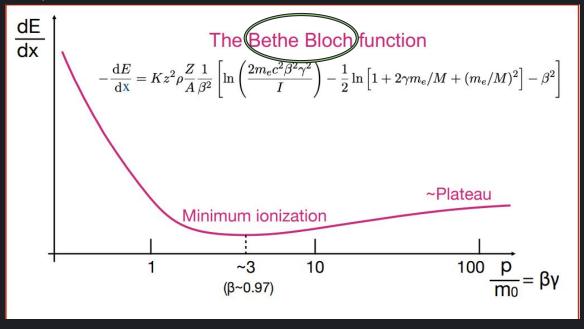




#### **Experimental precedents**



The energy loss all charged particles (but electrons) follows the **same behaviour** when it is represented as a function of their momentum/mass ratio.





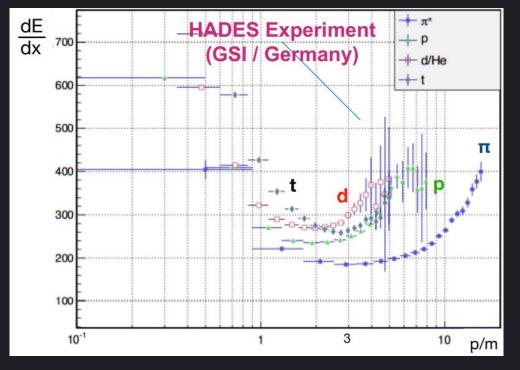
A same curve independent of the mass!





#### but... an unexpected result!





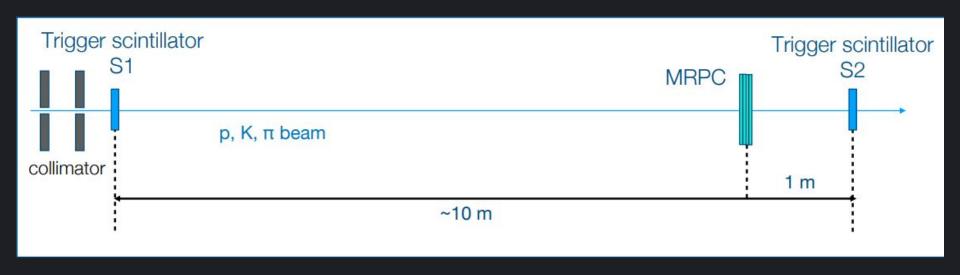
dE/dX measured at an RPC detector seems to show a
 mass dependent behavior





#### Our proposal: Experimental layout





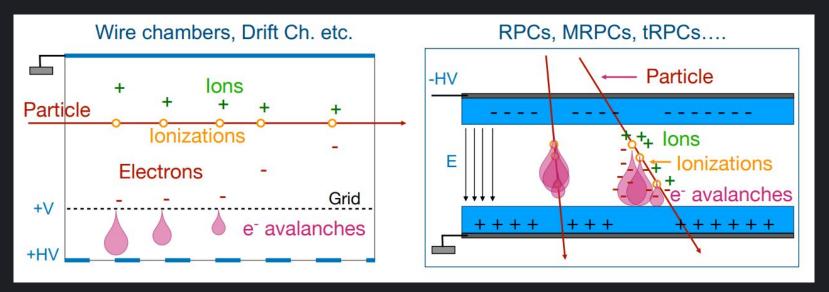
Basically we want to measure **Stopping Power** different **mass** particles at different **velocities** (p/m ratios)



#### Why RCPs could behave differently?

Wire chambers, Drift Ch., etc...

RCPs, MRCPs, tRCPs ...



<u>Unlike other detectors</u>, in RPCs, e- avalanches develop in the **same direction** as the incoming particle.



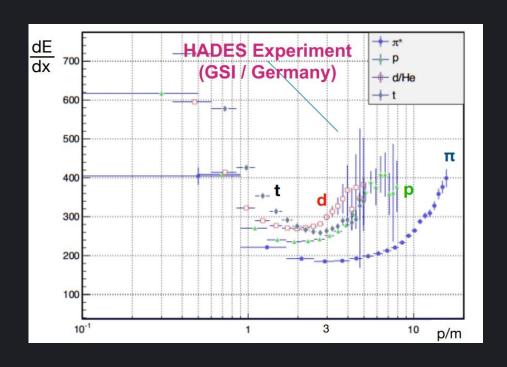
#### Our Path To Nobel Prize



If the bizarre HADES behaviour is **confirmed** 



Revolutionary Method for Mass Estimation would be discovered!!







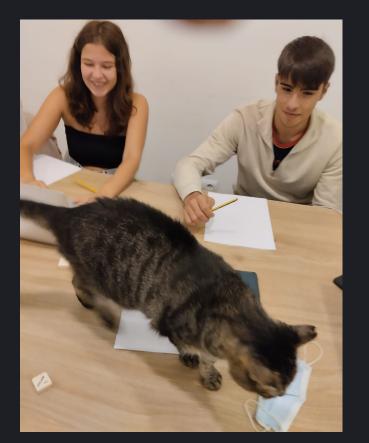
#### PREPARING OUR VISIT TO CERN











# OUR Schrödinger's cat: *CHUPITO*

