



# Honduras Experience in the 2020s

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**UNAH**

UNIVERSIDAD NACIONAL  
AUTÓNOMA DE HONDURAS

# Considerations of Honduras to joint CERN started in 2020

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## Three key points:

- Return to the country of individuals who have been formed abroad and already had participation in one of CERN experiments - LHCb Experiment
  - Returning to the country but maintaining LHCb collaboration research bonds through the Rio group-Brazil
- Supportive efforts and welcoming actions from **CERN** in the path to make a reality the Honduras' participation

# Initiative to joint CERN is being led by the **UNAH**



Authorities in the 2020s (Faculty of Science) receive the initiative and value the **HUGE** meaning for the country to being able to participate in the scientific program of CERN

Projection of UNAH to joint as associate members to LHCb Experiment

but no Scientific and Technical Cooperation Agreement Honduras-CERN existed at the moment



# First important step

● The Scientific and Technical Cooperation Agreement Honduras-CERN was **signed in 2021** by the Honduras Institute of Science, Technology and Innovation (IHCIETI). Previous attempt to consolidate this agreement happened 40 years ago.



Continued support from CERN representatives (Dr Salvatore Mele)  
Strategic meetings with Honduras's Ambassador

# Next Step - Consolidation of a MoU with LHCb Experiment

- UNAH authorities very interested and aware of the scientific benefits of this project for the university and education
  - Following years have been concentrated in polishing application and overcoming bureaucratic walls

Visit of former UNAH's Rector at CERN in Dec, 2022



# We have come to 2024

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- Scientific application to joint LHCb Experiment mature and ready to submit, and thus to start negotiations with the experiment Membership Committee
- Academic group to participate at LHCb is small and to joint efforts in *scientific computing projects*.
  - We aim to grow in the coming years - Capacity building - engaging more students and researches,
- Change of authorities in the university this year
  - The final actions are on their side.
  - We keep pushing to give the final step to make a reality our participation

# Students in the CERN summer student program

11 Septiembre 2023

## Estudiantes de Física participan en programa de verano 2023 del CERN



Periódico  
**PRESENCIA UNIVERSITARIA**

Periodista Yuri Vargas, Presencia Universitaria

Dos estudiantes de Física de la Universidad Nacional Autónoma de Honduras (UNAH) participaron en la Escuela de Verano 2023 del Centro Europeo para la Investigación Nuclear (CERN), en Ginebra, Suiza.

Se trata de Óscar Hernández Martínez y Daniel Martínez Teruel, ambos pasantes de último año de la carrera en Ciudad Universitaria,



## Feasibility study of a PEEK light guide for the LHCb ECAL Upgrade II

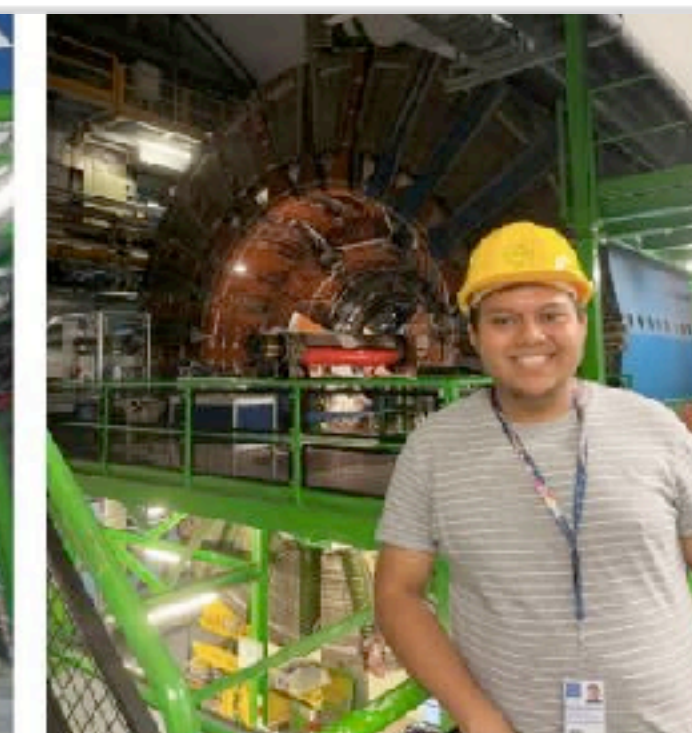
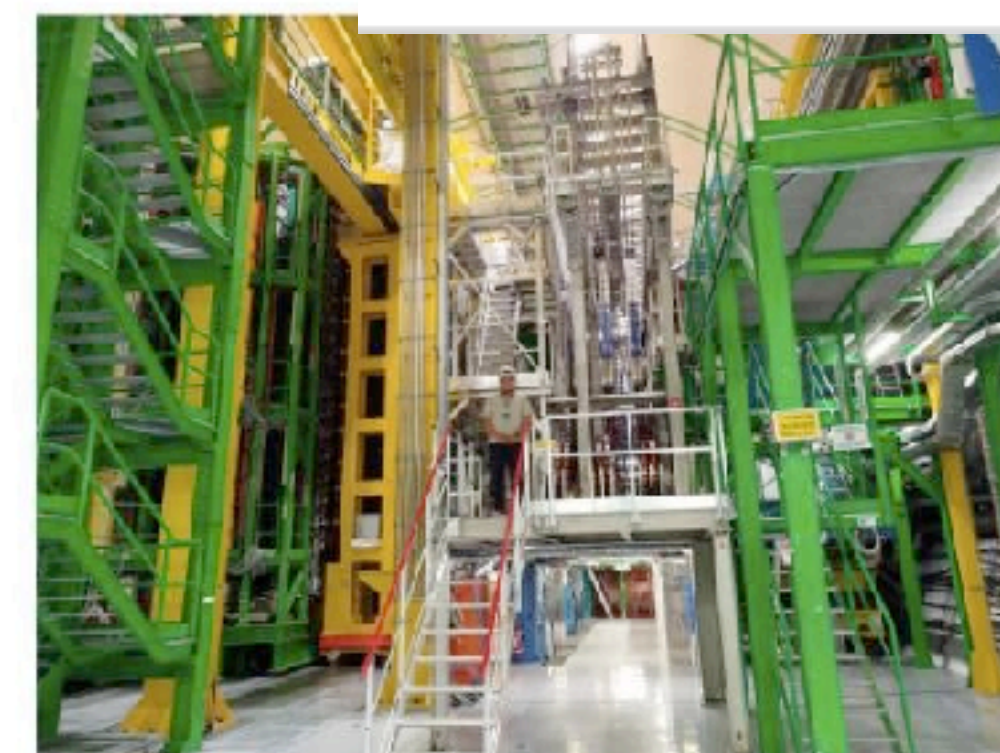
Jose Fernando Martinez Rosales (UNAH)

Supervisor: Augusto Sciuccati / Markus Benner

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Thank you!

For your attention



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