



# REYES

REMOTE EXPERIENCE FOR YOUNG ENGINEERS AND SCIENTISTS  
EXPERIENCIA A DISTANCIA PARA JOVENES INGENIEROS Y CIENTIFICOS

✉ [reyes-stem@berkeley.edu](mailto:reyes-stem@berkeley.edu)  
🌐 <https://physics.berkeley.edu/reyes>  
🐦 @ODUREYES  
📺 @reyes-stem  
📘 /ODUREYES

**Berkeley**  
UNIVERSITY OF CALIFORNIA

  
**OLD DOMINION**  
UNIVERSITY



Caracas, Venezuela







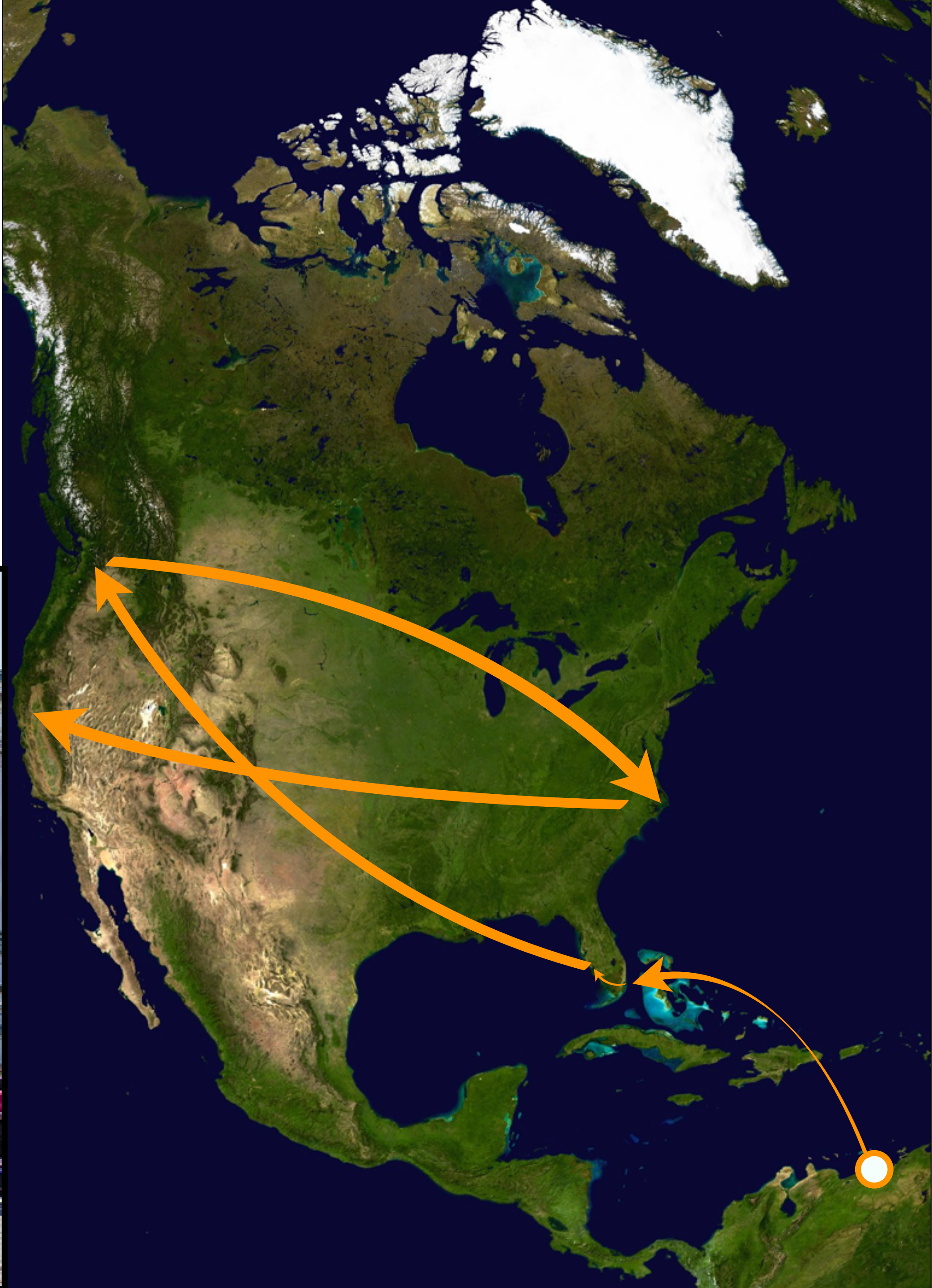


Jefferson Lab  
Newport News, Virginia





University of California, Berkeley  
Berkeley, CA





De dónde venimos?

Como fuimos creados?

De qué estamos hechos?

**Carl Sagan**  
somos polvo de estrellas





¿cuales son las fuerzas  
fundamentales de la naturaleza?



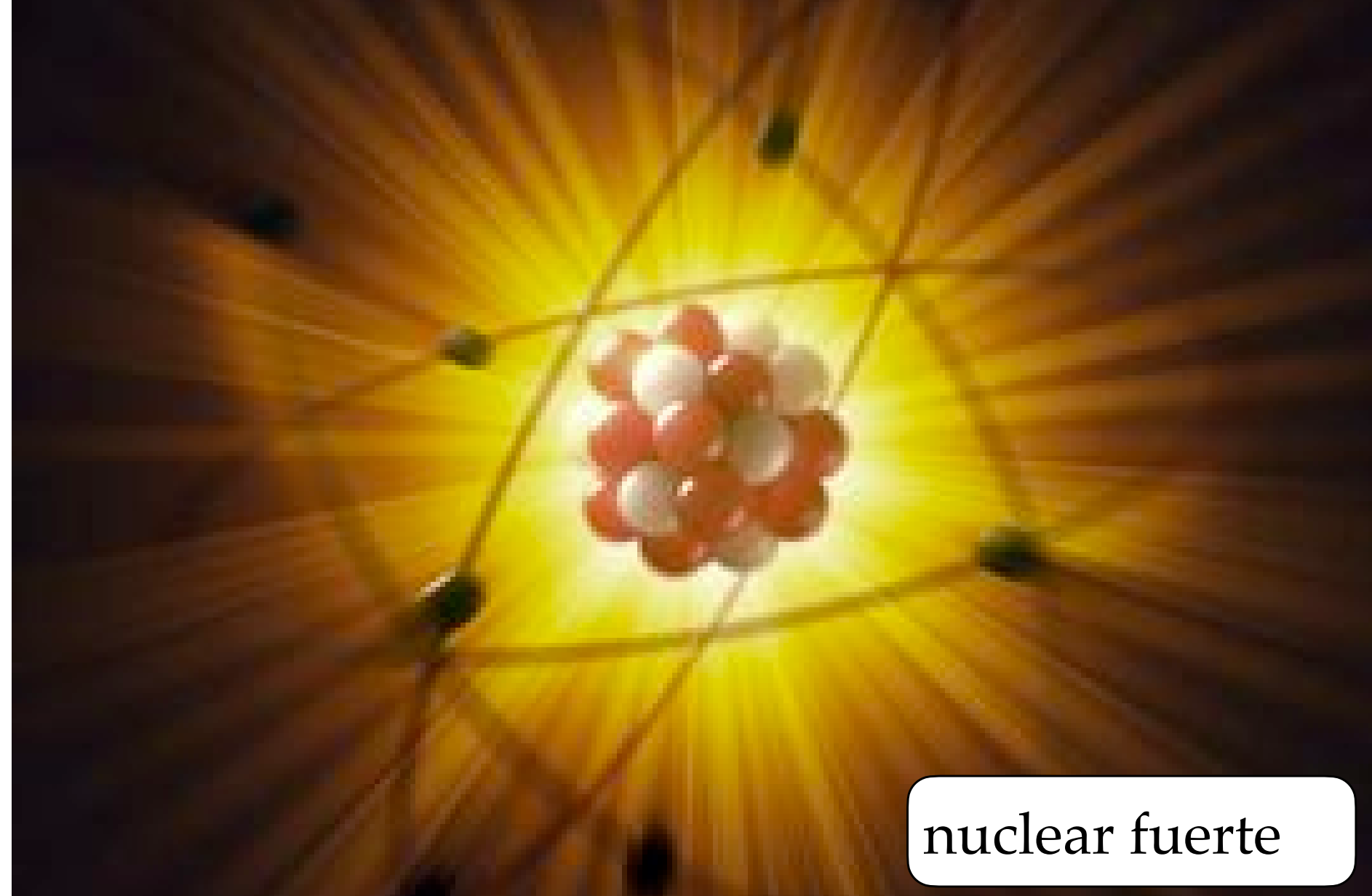




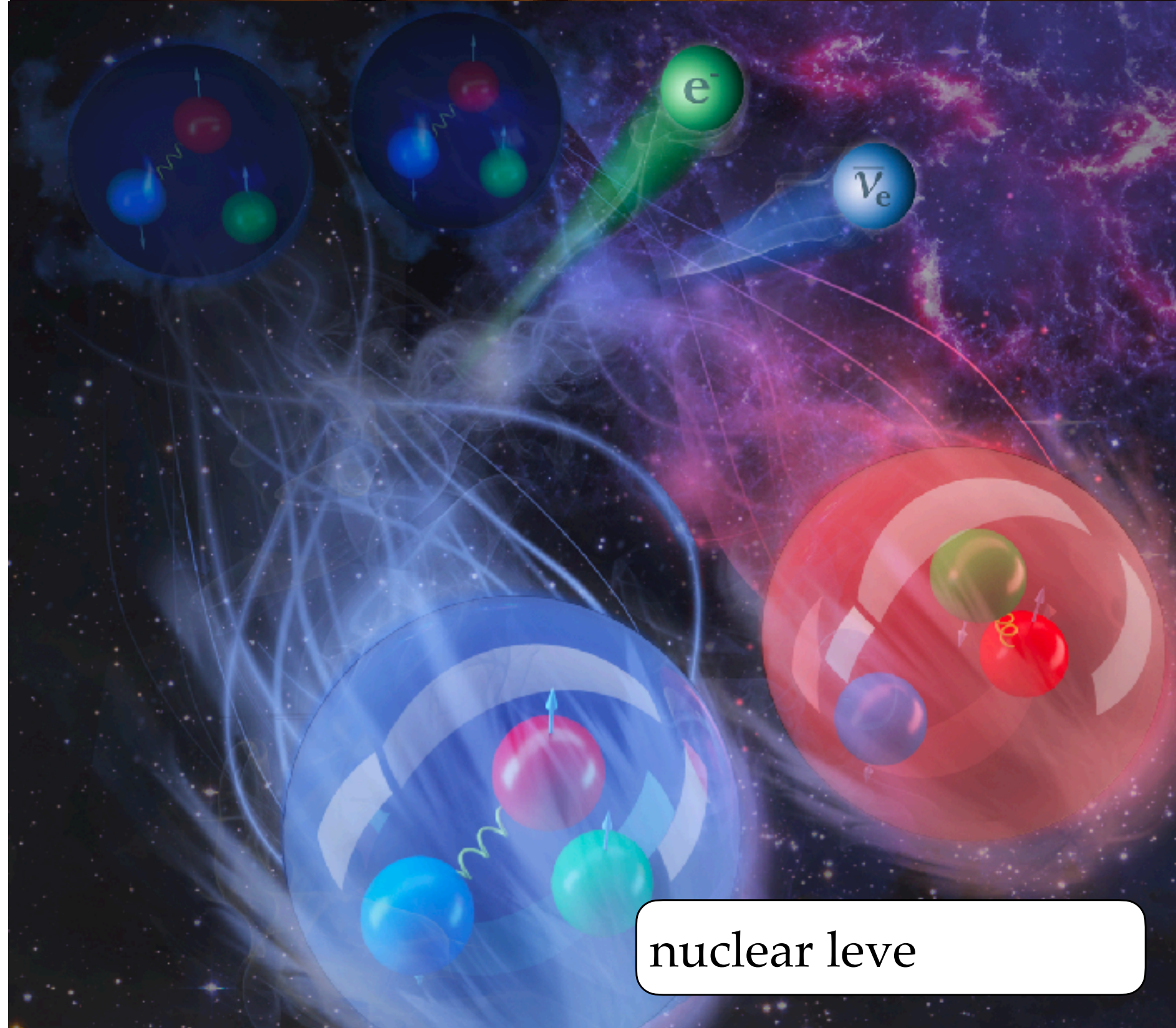
gravedad



electromagnetica



nuclear fuerte



nuclear leve



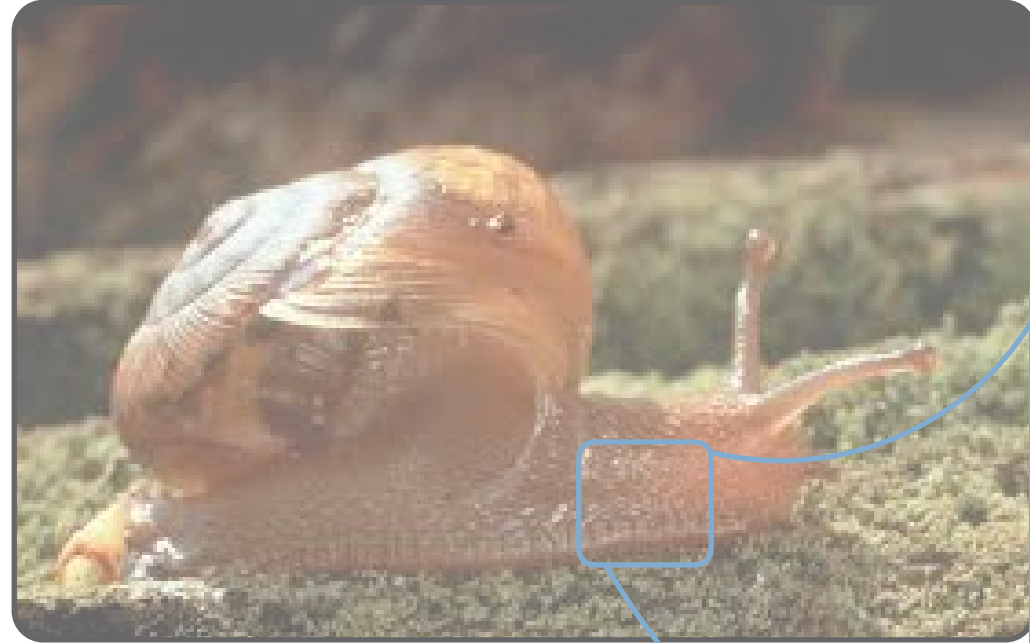




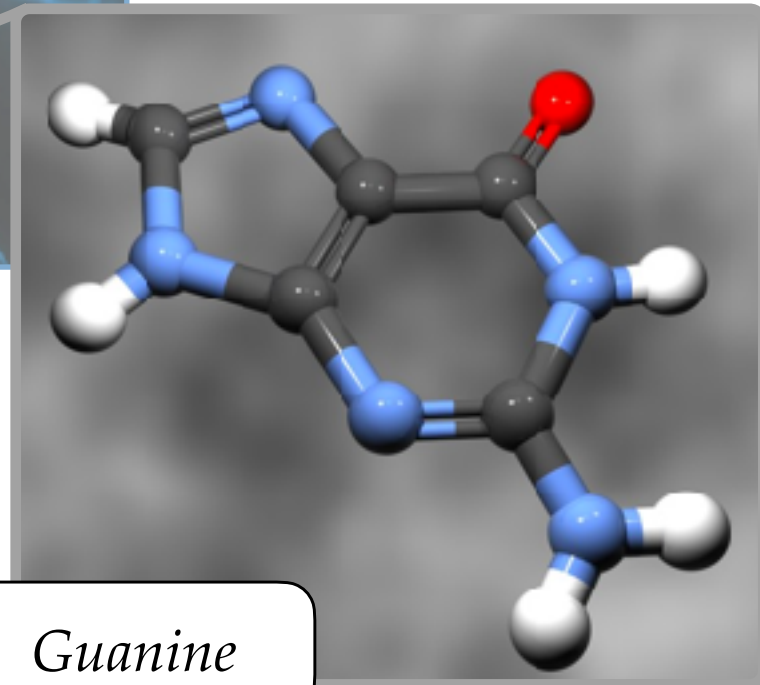


DNA



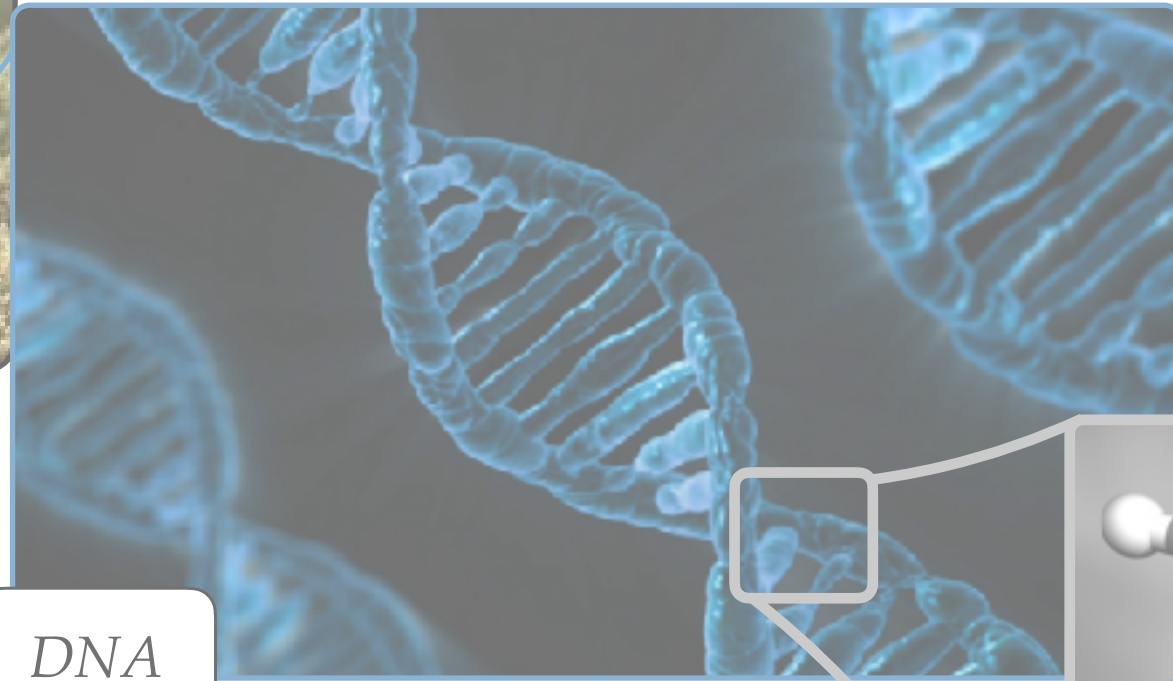
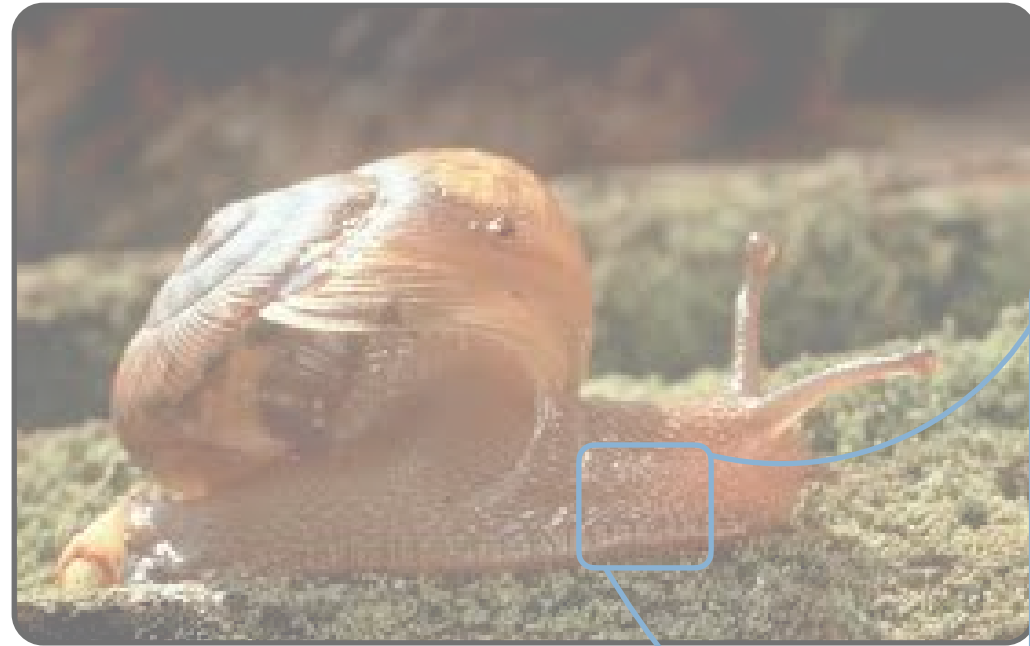


*DNA*

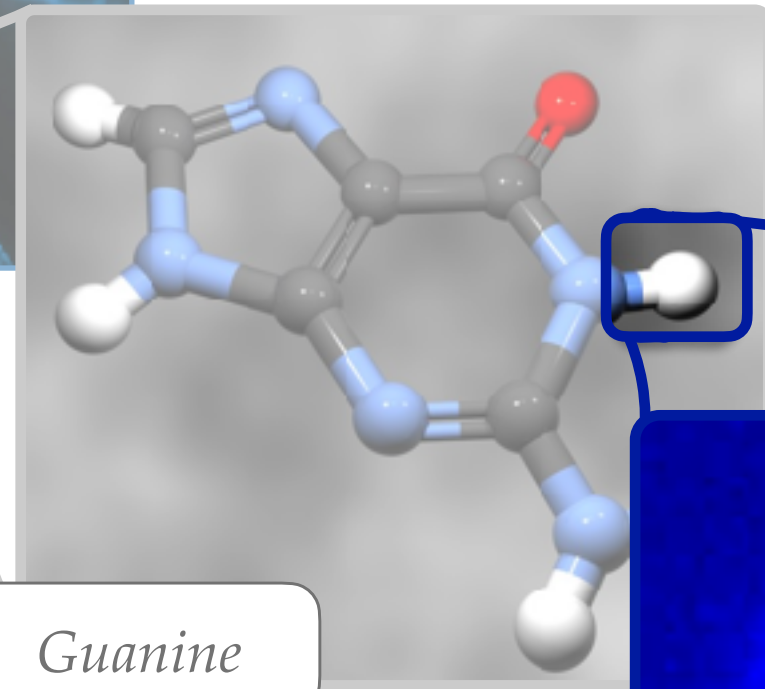


*Guanine*

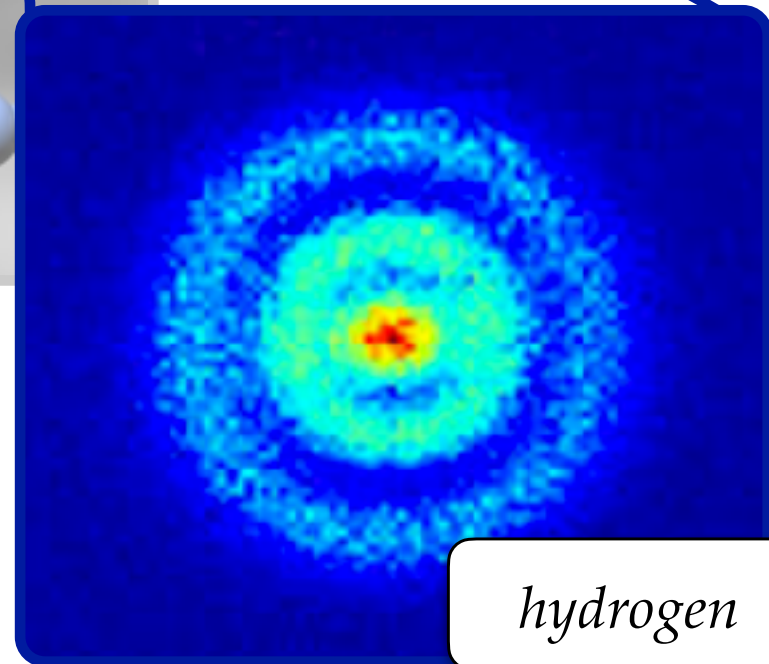




DNA

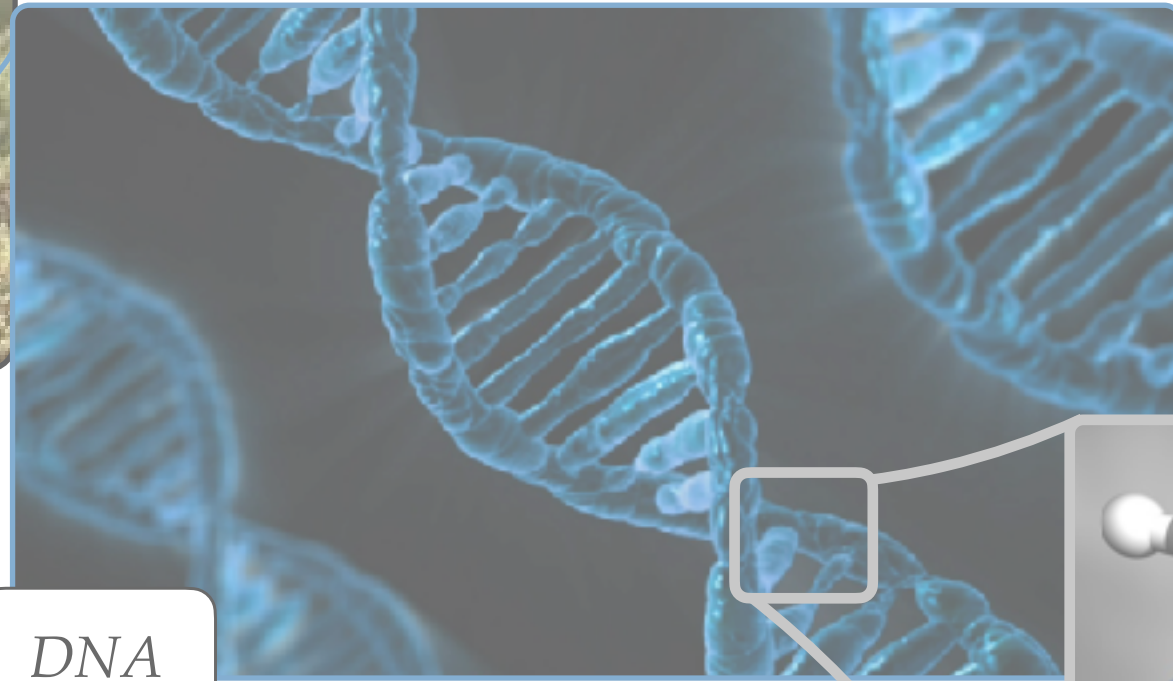
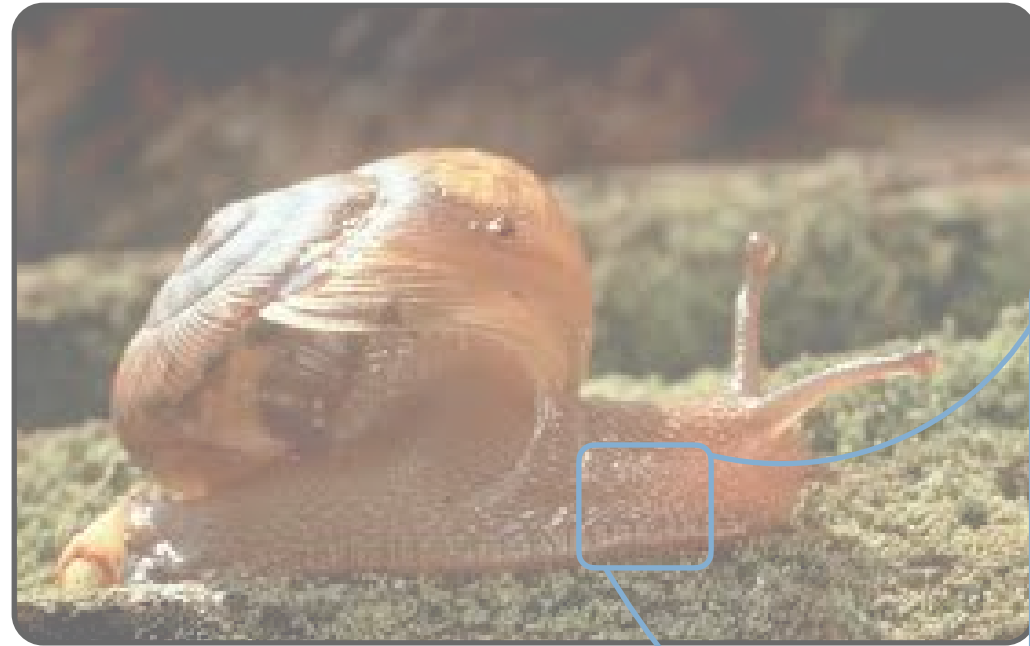


Guanine

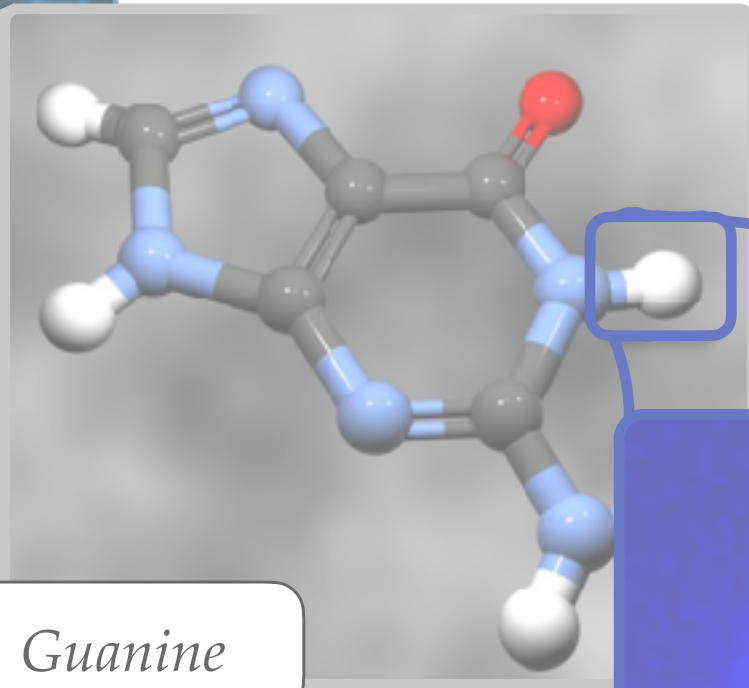


hydrogen

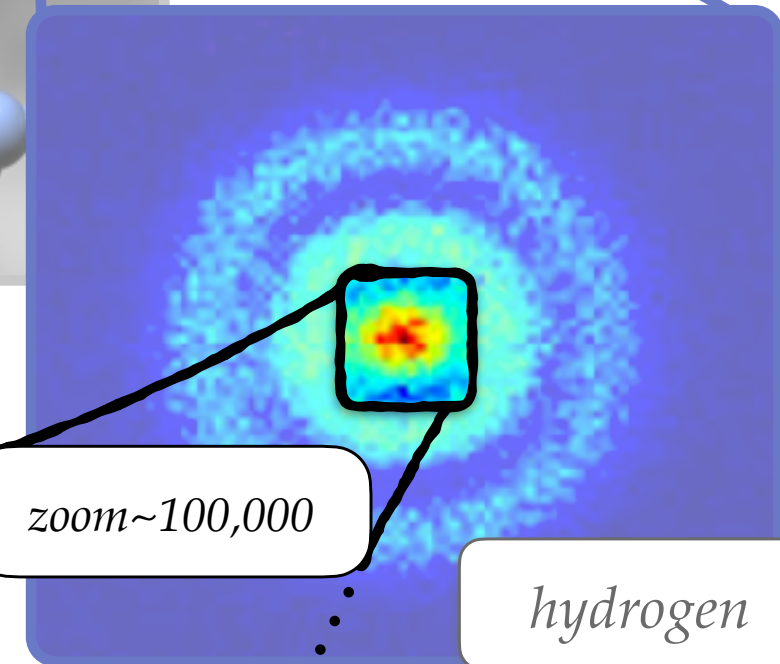




DNA



Guanine

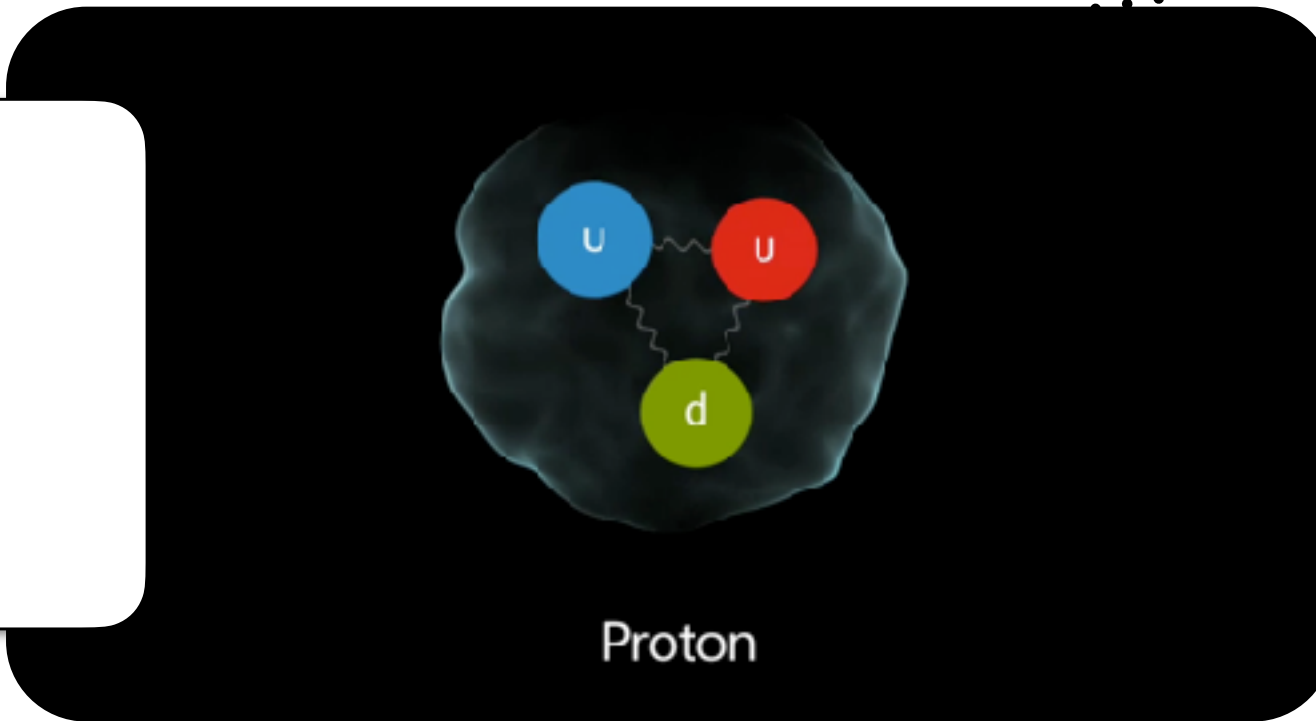


zoom~100,000

hydrogen

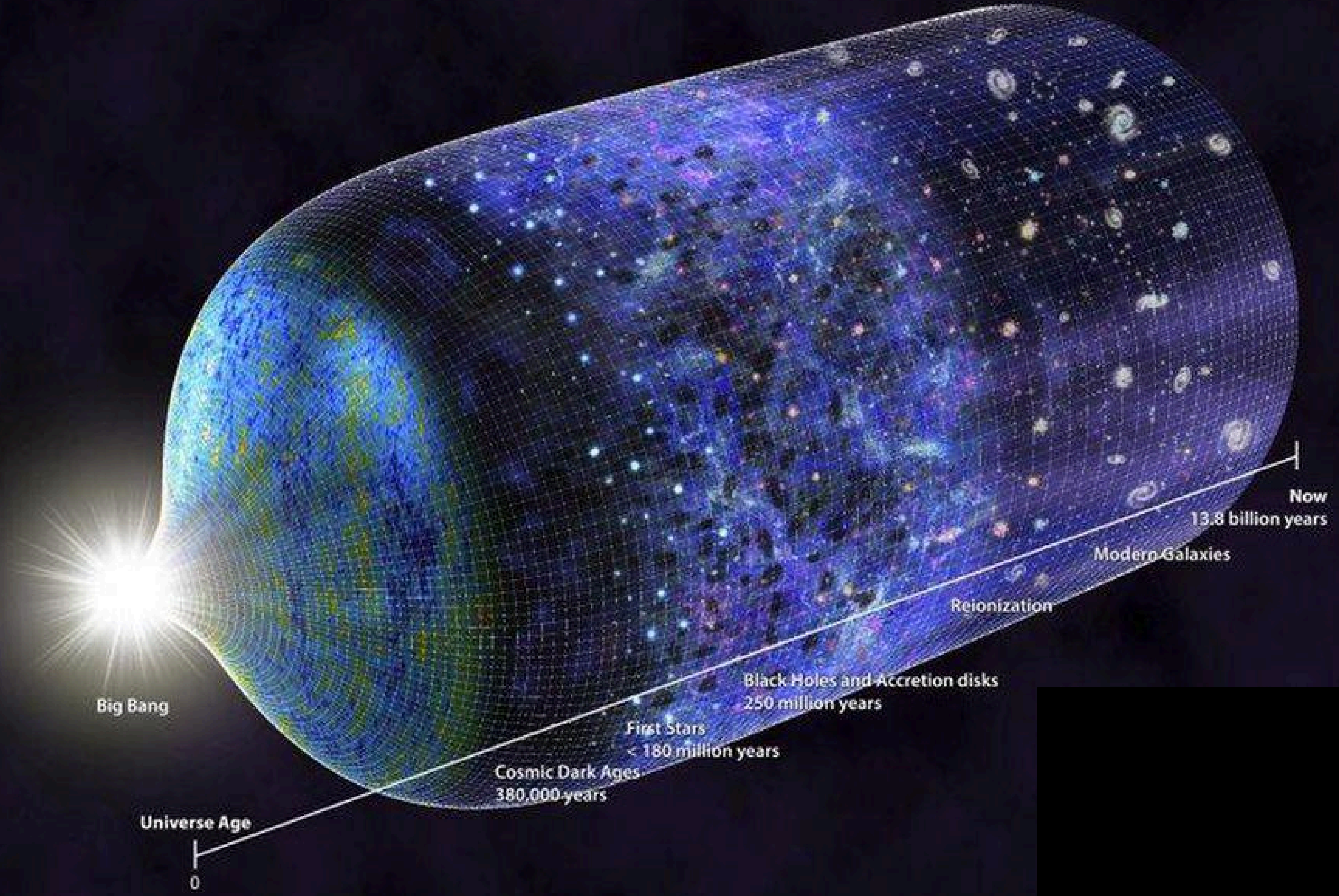
*the proton:*

- *the lightest of all nuclei*
- *carries 99.95% of hydrogen's mass*
- *made of quarks and gluons*



Proton





Big Bang

Universe Age

0

Cosmic Dark Ages  
380,000 years

First Stars  
< 180 million years

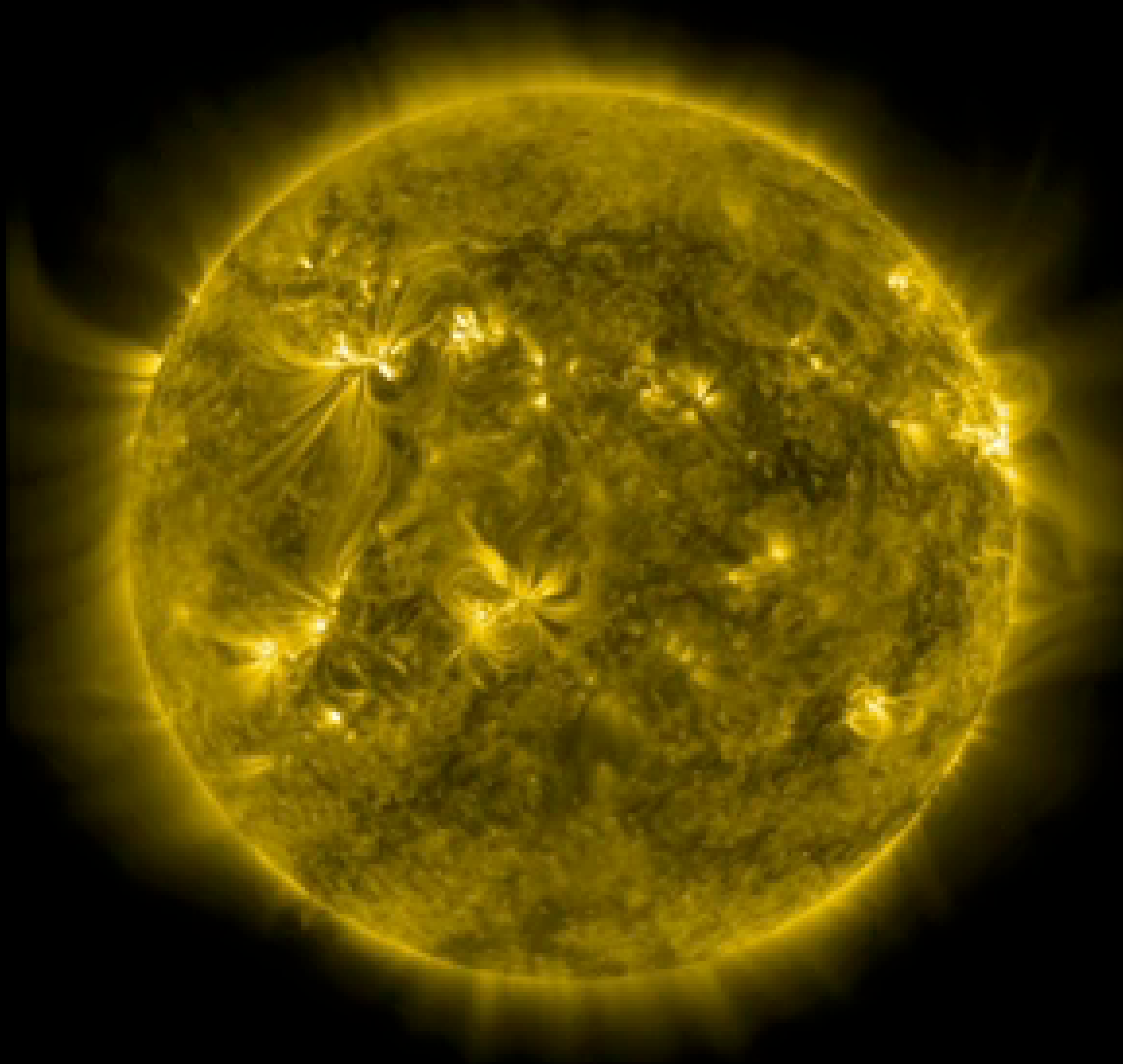
Black Holes and Accretion disks  
250 million years

Reionization

Modern Galaxies

Now  
13.8 billion years







# Experiencias de divulgación y educación

**REYES** (REMOTE EXPERIENCE FOR YOUNG ENGINEERS AND SCIENTISTS)

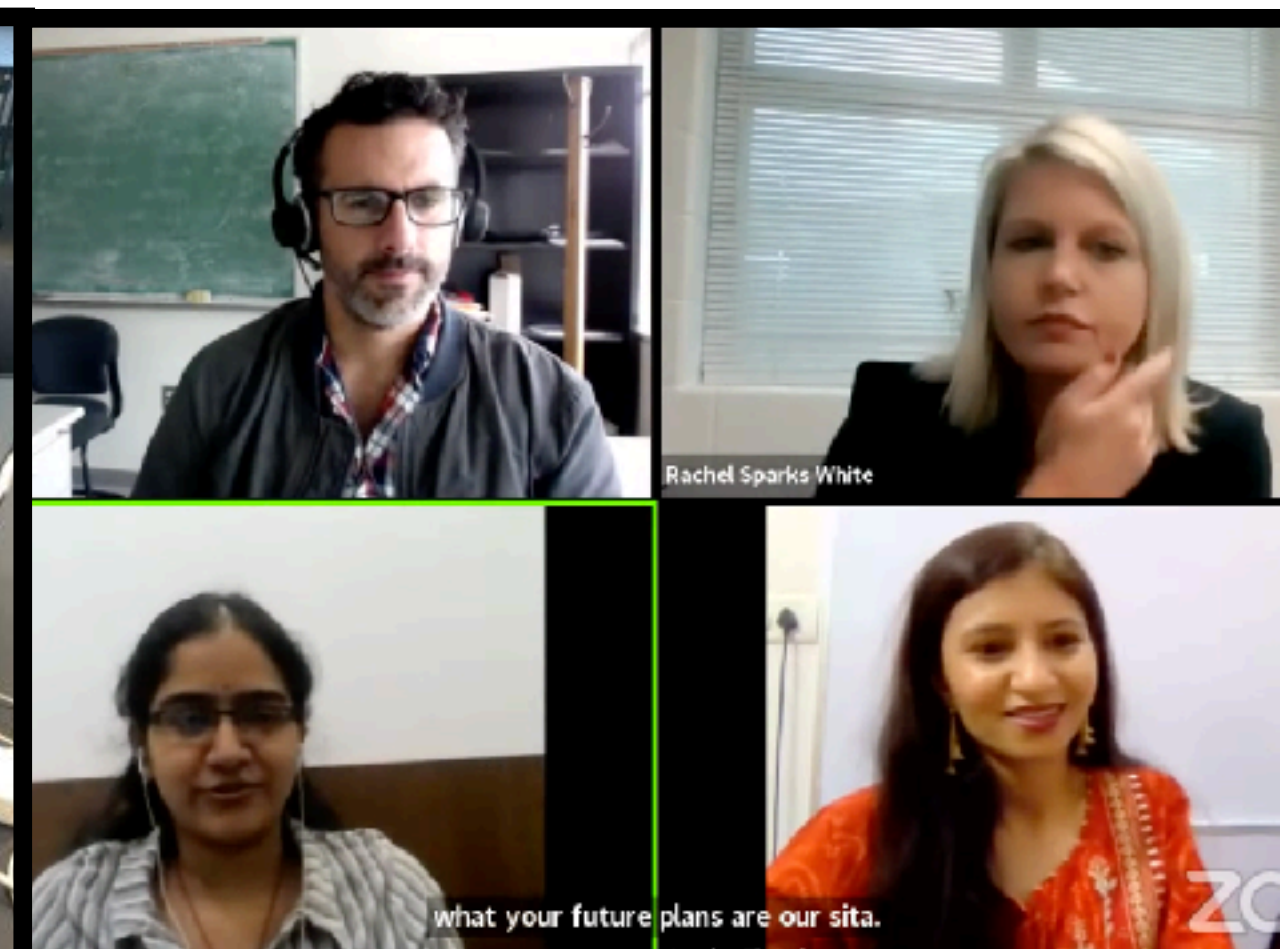
**PYTHON 4 PHYSICS**

**HALES** (HIGH ACHIEVING LATINX IN ENGINEERING AND SCIENCES)

**ODU/JLAB REU**

**SULI**

**ESTANCIAS DE VERANO PARA MEJICANOS EN BERKELEY**





# REYES



STEM-H virtual sessions and classes; supported by UC Berkeley and Old Dominion U.



Free and open to the public, accessible via YouTube



Mentoring from world experts

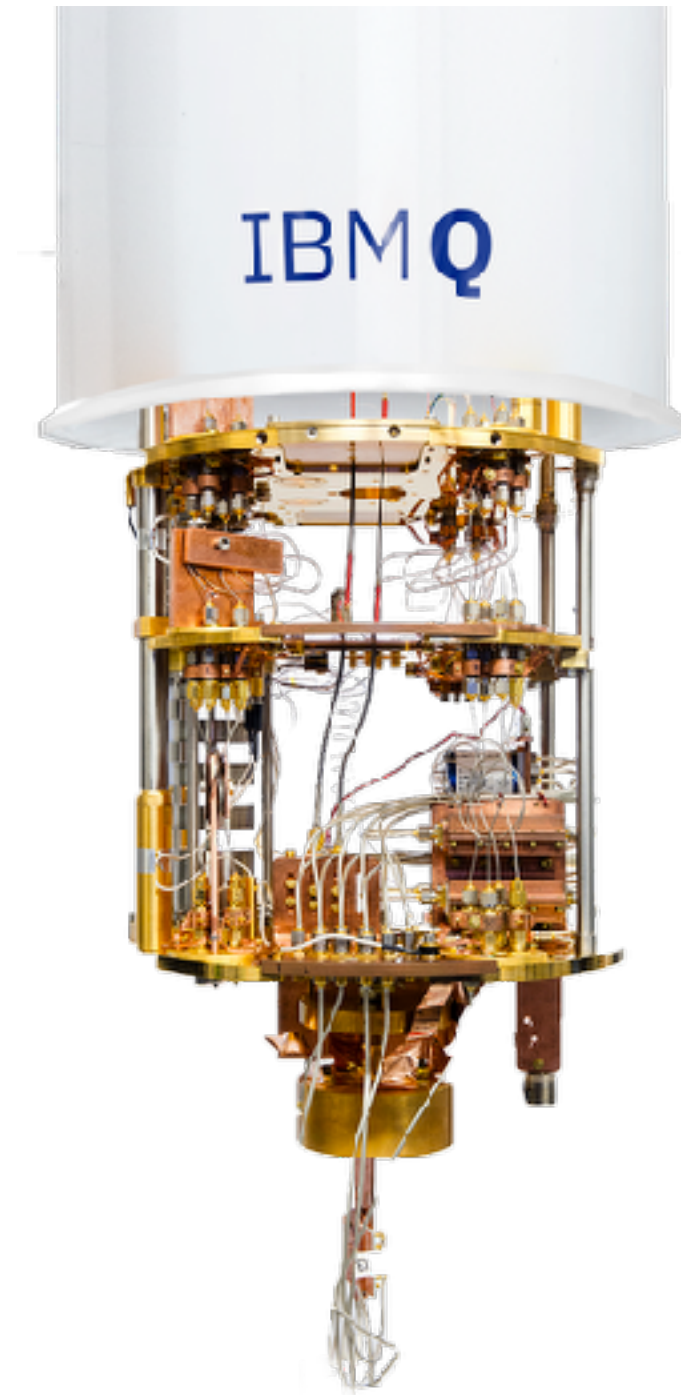




entomología



inteligencia artificial



computadoras cuánticas

# TEMAS





**EXPERTOS**

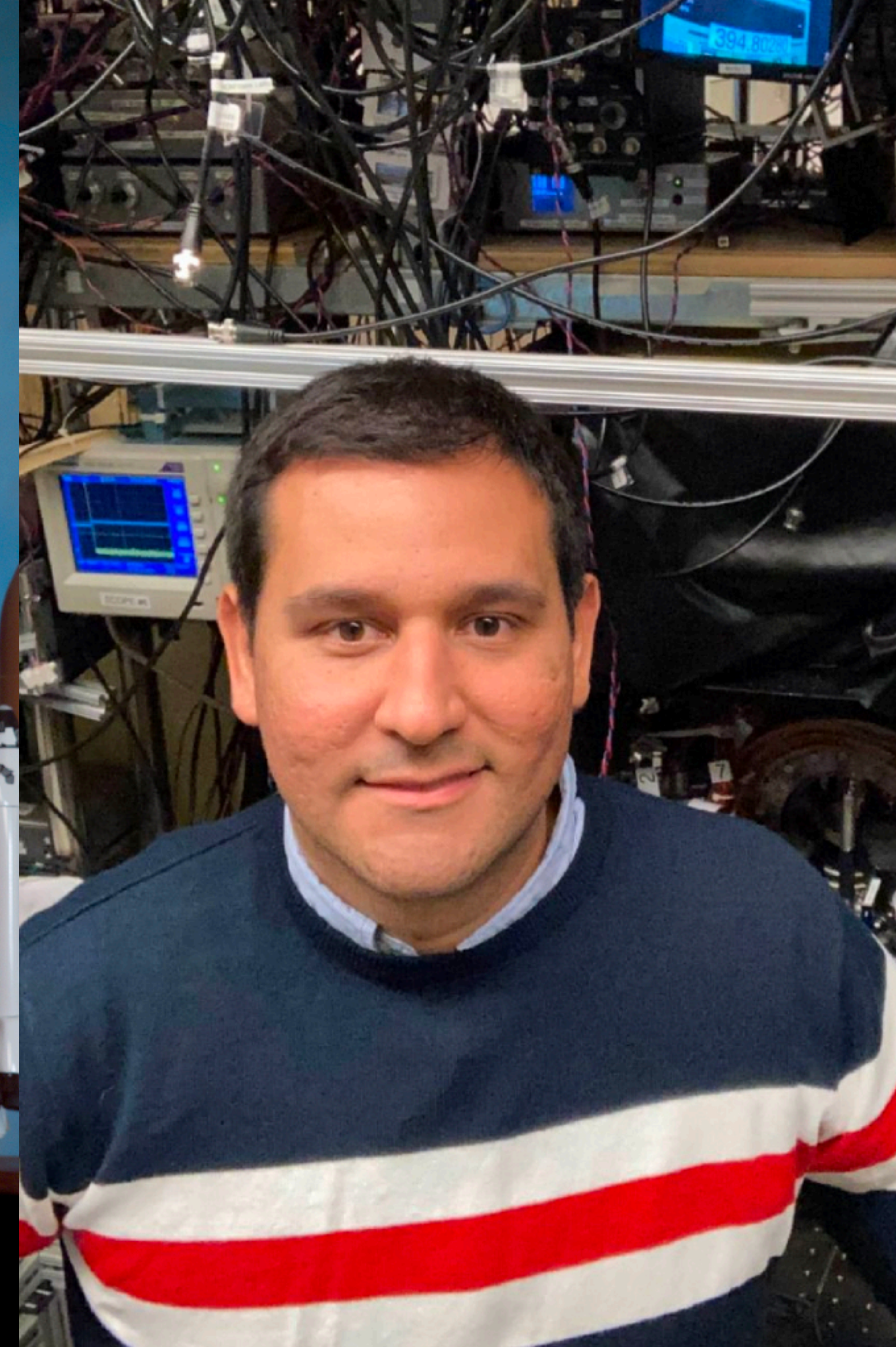




Jose Hernandez



Elen Ochoa

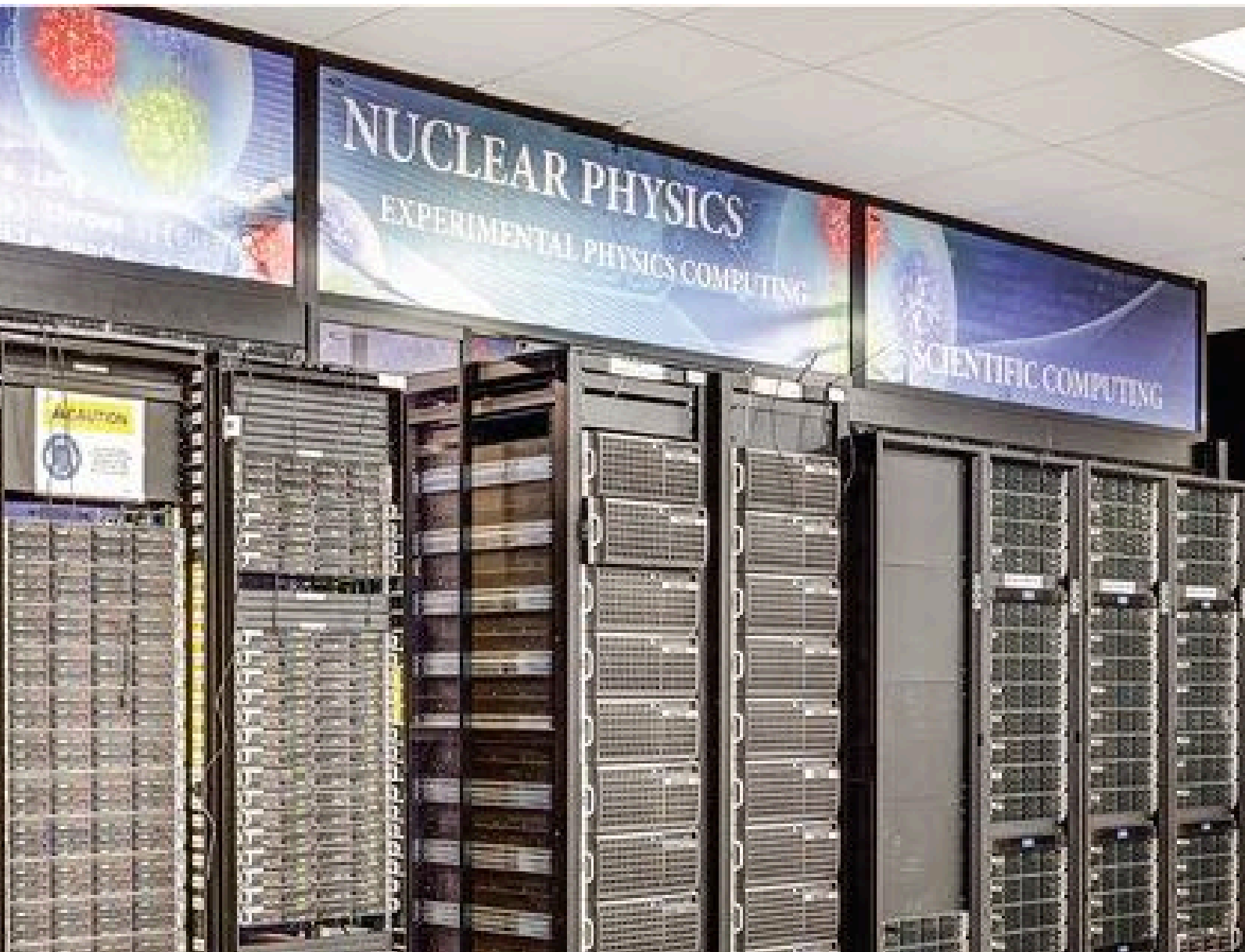


Edwin Pedrozo Peñafiel



# Clases

Python4STEM



hosted live starting June 27

Fundamentales de ingeniería



recordings available via YouTube

Musical flow of STEM



recordings available via YouTube



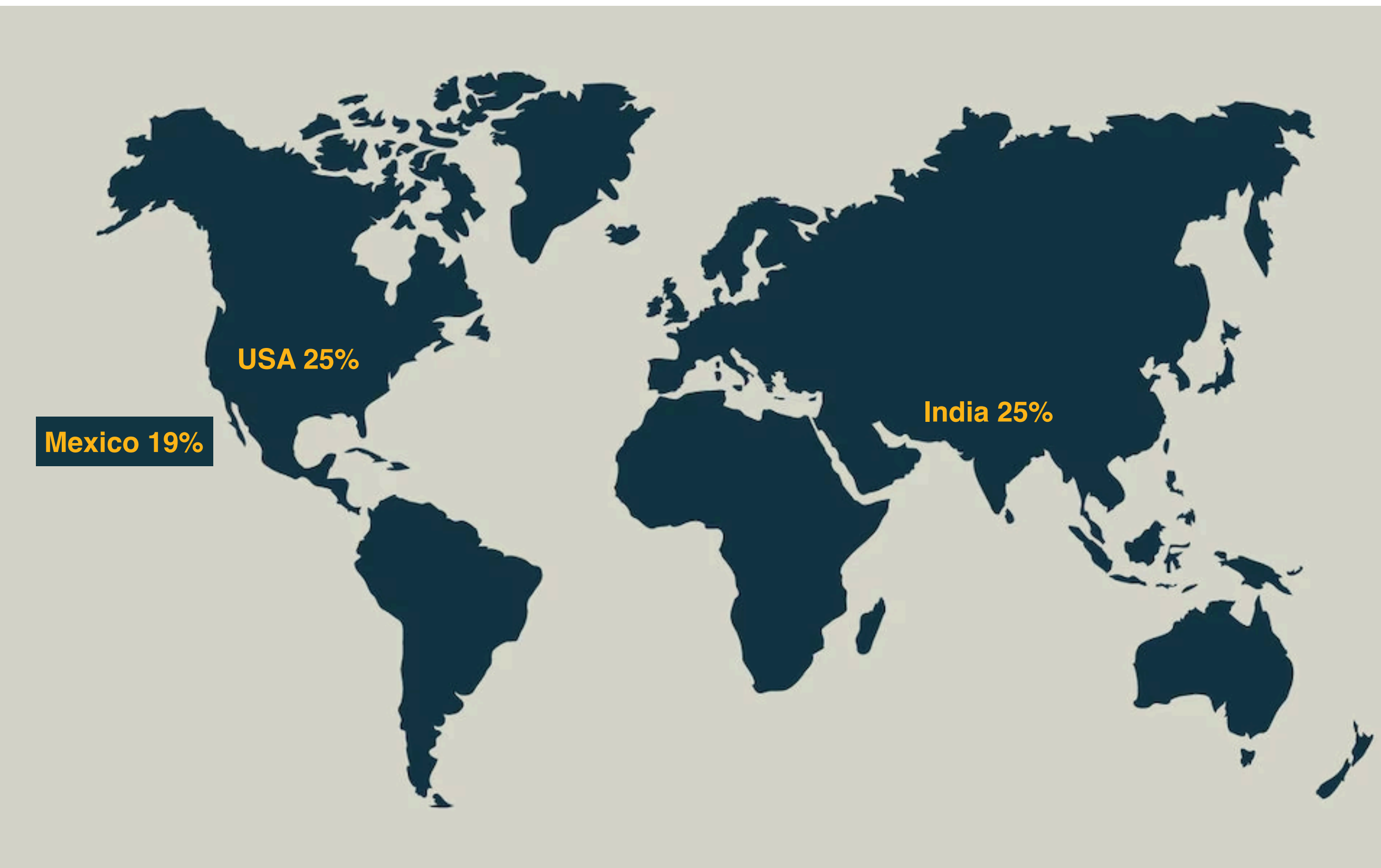
# Programa de mentoría



- **Mentoría basada en la investigación**
- **Abierto a todos**
- **El 25% son estudiantes de primera generación.**
- **Los resultados incluyen una presentación, informe y actas.**
- **Los estudiantes y mentores obtienen certificados de participación.**



# Algunas estadísticas



- más de 12.000 inscritos
- más de 135 países
- 75% mayores de 18 años, 25% menores
- 75% fuera de EE. UU.
- 41% mujeres // 56% hombres // 1,5% no binarios
- 48% Universidad // 21% HS // 17% Graduado.
- %75 reportan que se sienten mas motivados a continuar en las ciencias



# PROGRAMA VIRTUAL DE STEM-H



STEM-H virtual sessions and classes; supported by UC Berkeley and Old Dominion U.




Free and open to the public, accessible via YouTube



Mentoring from world experts



 <https://physics.berkeley.edu/reyes>

 @reyes-stem

