



VNIVERSITAT
ID VALÈNCIA



European Research Council

About me: Pablo Torres Sánchez
IFIC Newcomers Fest 2024
25th November 2024

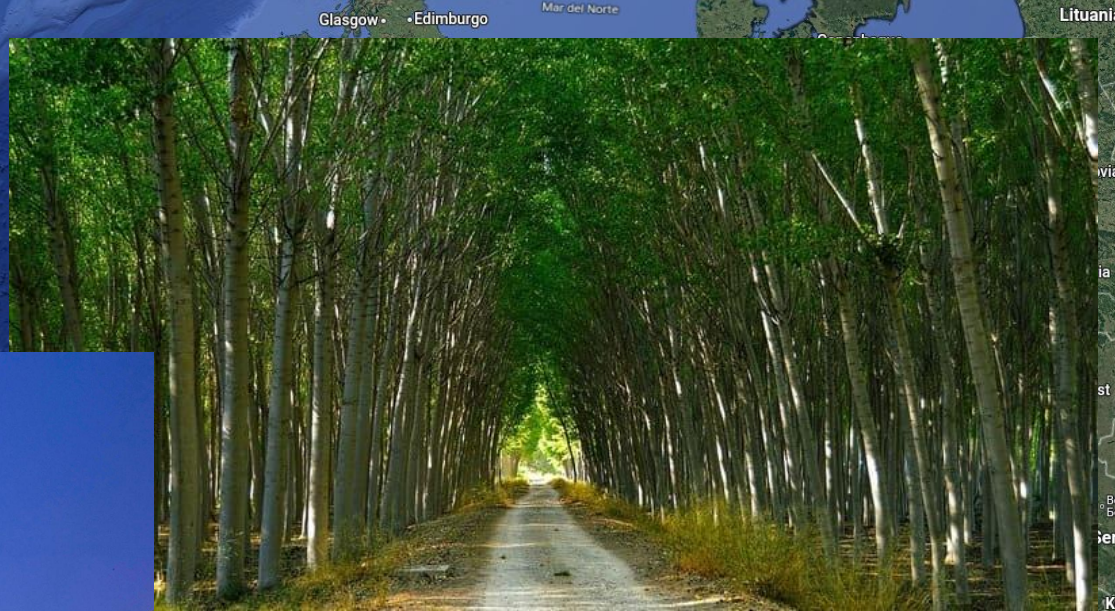
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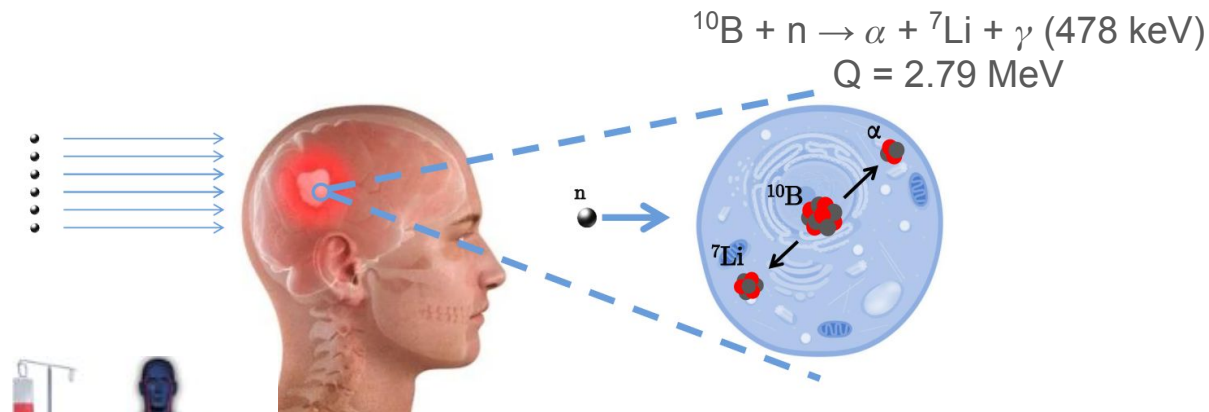

Actually, I come from Santa Fe, a small town near the city of Granada, in southern Spain



- Degree in Physics (2017)
at University of Granada
- Stay at ILL Grenoble for
Masters (2018)
- PhD in Nuclear Physics (2022)
at University of Granada
 - Stays for experiments at
CERN and INFN-LNL
- 1st Postdoc at Granada
 - Experiments at JRC -
Geel
- Now at IFIC (since January)
 - Neutron&Gamma
Spectroscopy Group
 - Supervisor:
César Domingo Pardo



Nuclear Physics for medical applications: Boron Neutron Capture Therapy (BNCT)

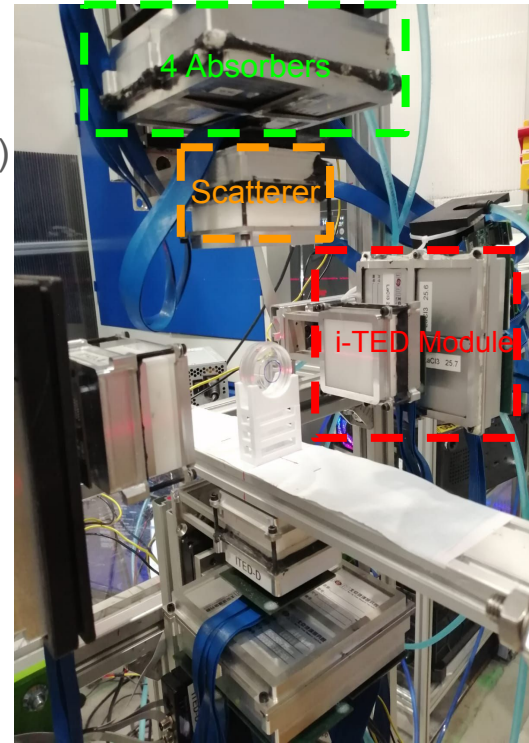
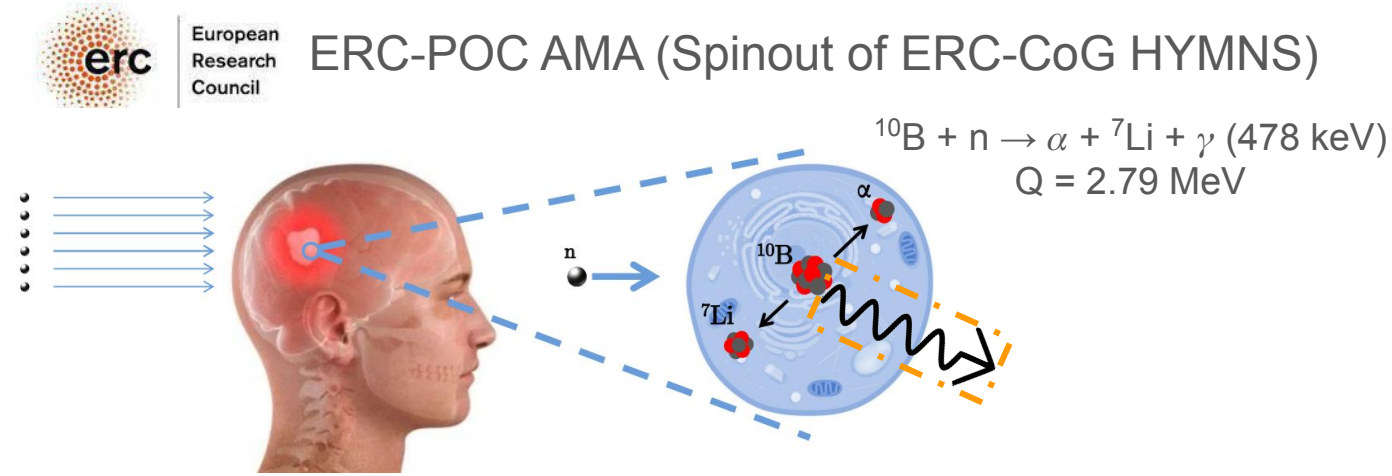
^{10}BPA
intravenous
infusion / 20
ppm ^{10}B in
blood

During my PhD:

- Measuring cross-sections of interest for neutron dosimetry: $^{14}\text{N}(n,p)$
- Developing a device for producing neutron beams suitable for clinical treatments

1st Postdoc:

- Measuring key nuclear data to validate the device from PhD



Developing and upgrading the Compton Imaging Detector iTED for its application in BNCT

- Simulations (MCNP + Geant4)
- Experiments at neutron sources (ILL, earlier this year) and clinical-grade facilities (Birmingham, next spring)
- 3D imaging reconstruction

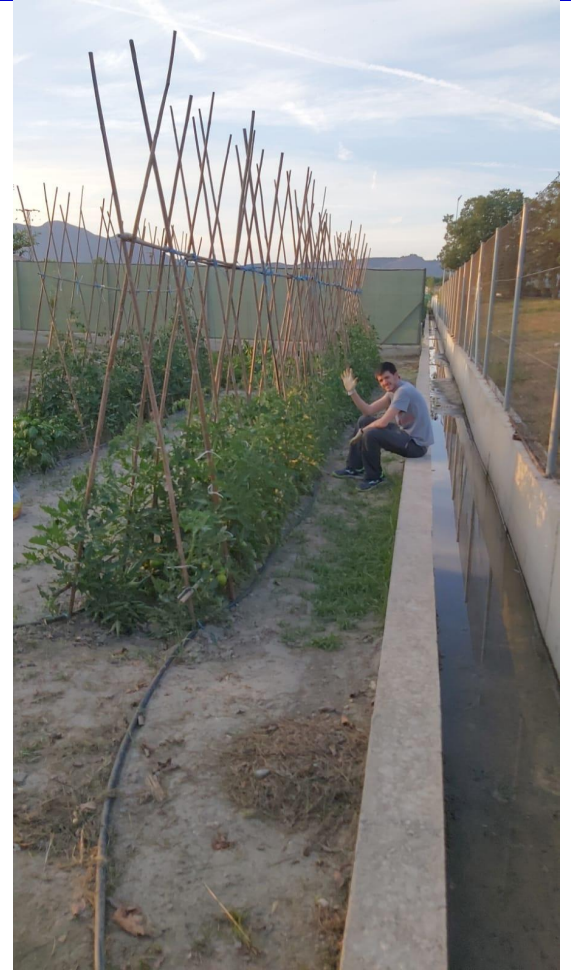
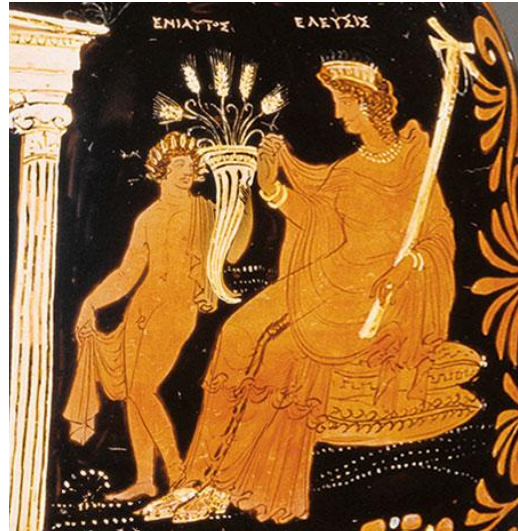
History, specially:
Ancient civilizations
Mythology

Agriculture:

- Growing vegetables
- Harvesting

and...

Cooking pizzas!



Thank you for your attention
see you around!