



# 2nd IFIC day on Cultural Diversity

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# The UN World Day

- The World Day for Cultural Diversity for Dialogue and Development is celebrated every year on May 21st
- It was promoted by UN in 2002 to:
  - Highlight the richness of world's cultures
  - Raise awareness of cultural inclusion
  - Promote dialogue to help prevent conflicts
- It is considered by UN as critical as biodiversity



# CERN as an example

Founding members, 1954



CERN now, 2025



Member states: there is a strong overlap with EU, both in '54 and now....

# CERN as an example

Founding members, 1954

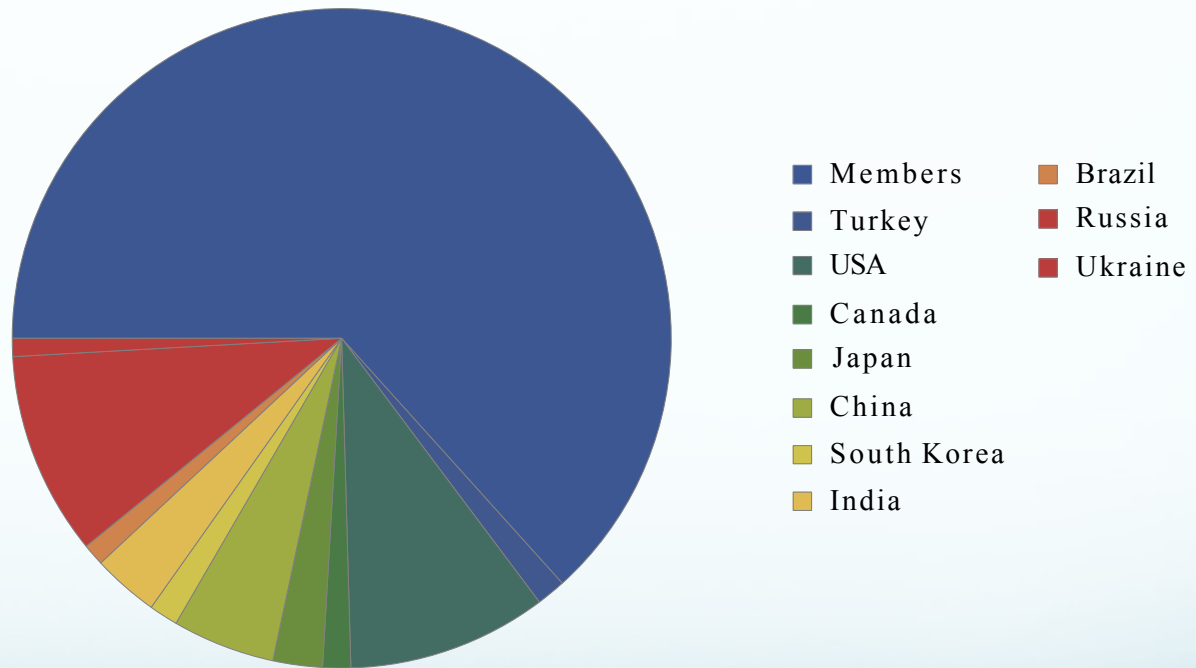


CERN now, 2025



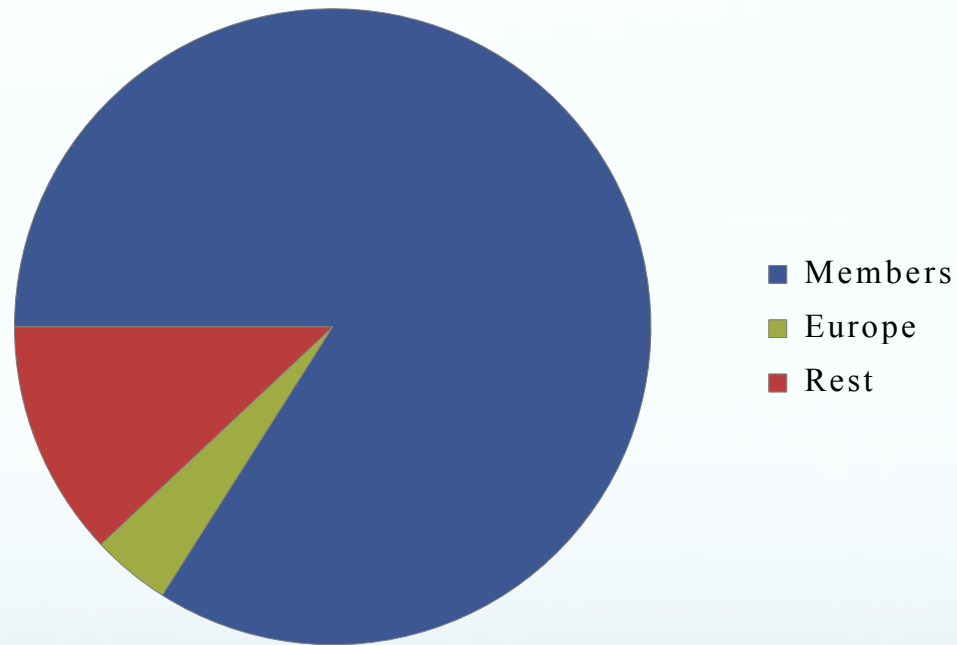
Member states: there is a strong overlap with EU, both in '54 and now....

# CERN as an example, 2



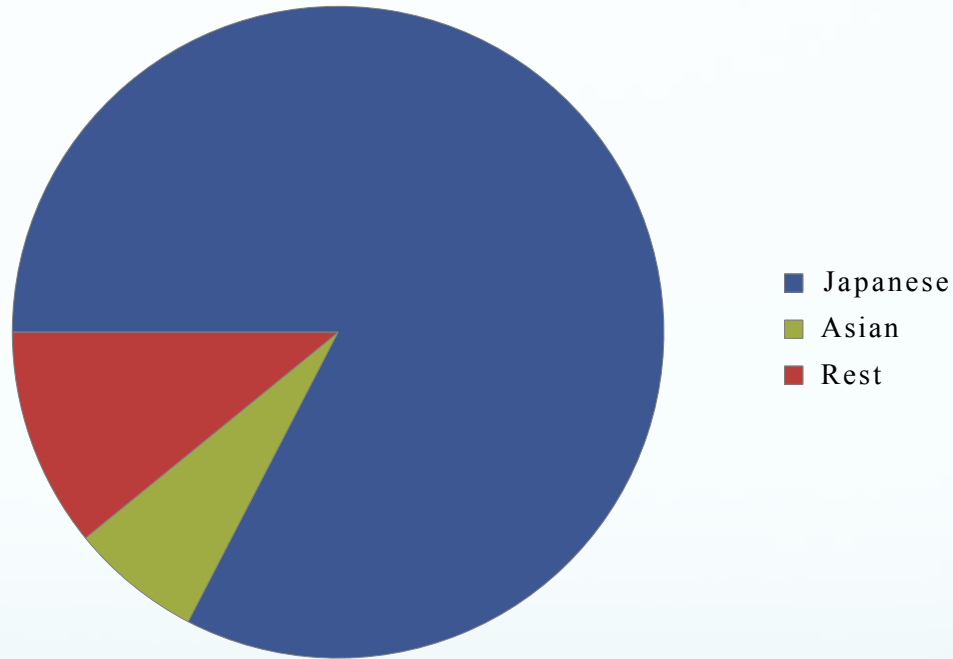
**CERN Users as of 2020**

# CERN as an example, 3



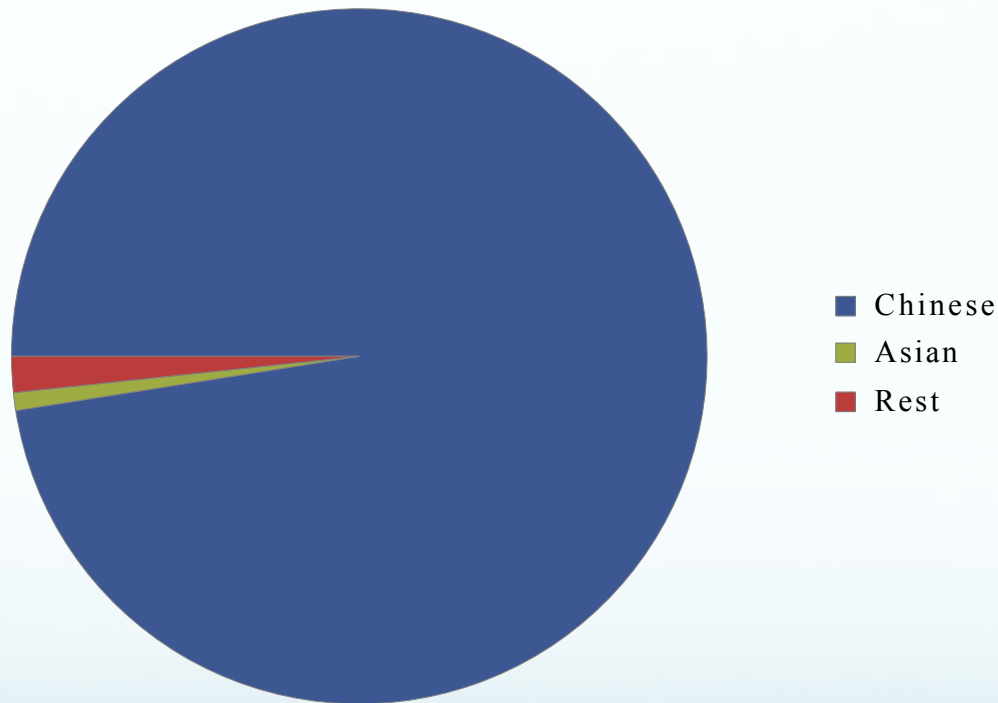
CERN theory division as of 2025

# Comparison: theory dpt



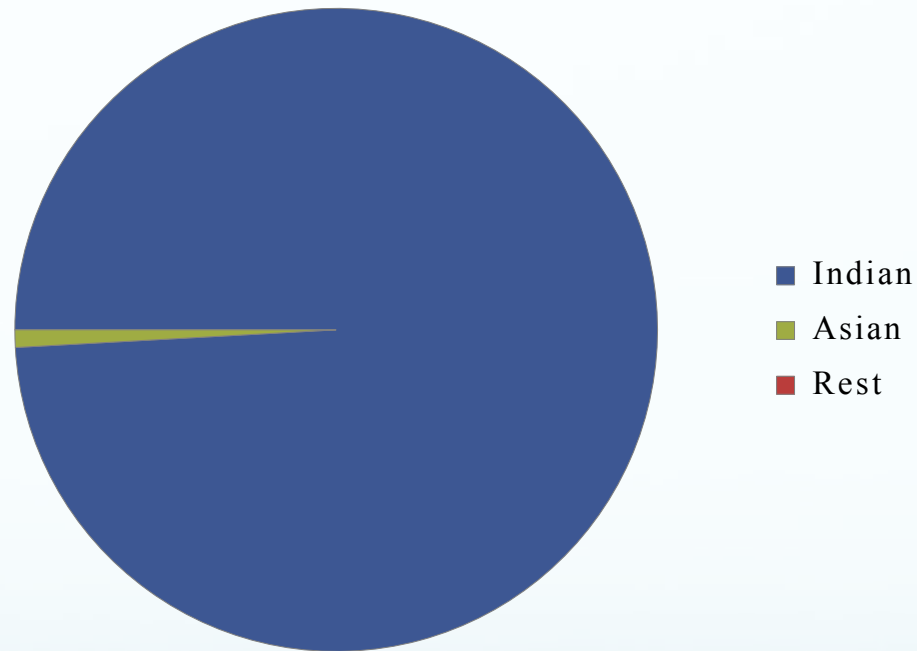
KEK (Tsukuba, Japan)  
theory researchers as of 2026

# Comparison: theory dpt



**IHEP (Beijing, China)**  
**theory researchers as of 2026**

# Comparison: theory dpt

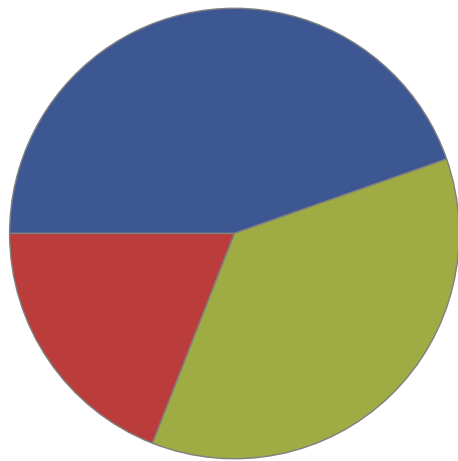


TIFR (Mumbai, India)  
theory researchers as of 2026

# Multi-“culturality” at IFIC

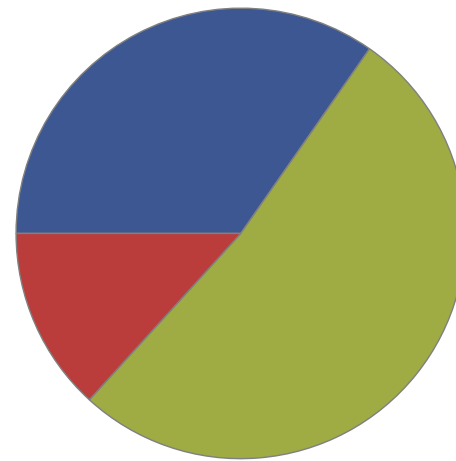
- IFIC is a rather “diverse” environment from the point of view of nationalities:
  - There are researchers and students from more than 40 countries
  - 95 staff and tenure track members come from Europe, “only” 78 from Spain
  - PhD and post-doctoral students origins are extremely diversified:
    - 82 from Spain
    - 125 from Europe (including Spain)
    - 21 from Asia
    - 23 from the Americas
    - 1 from Africa

# IFIC composition by nationalities



2025

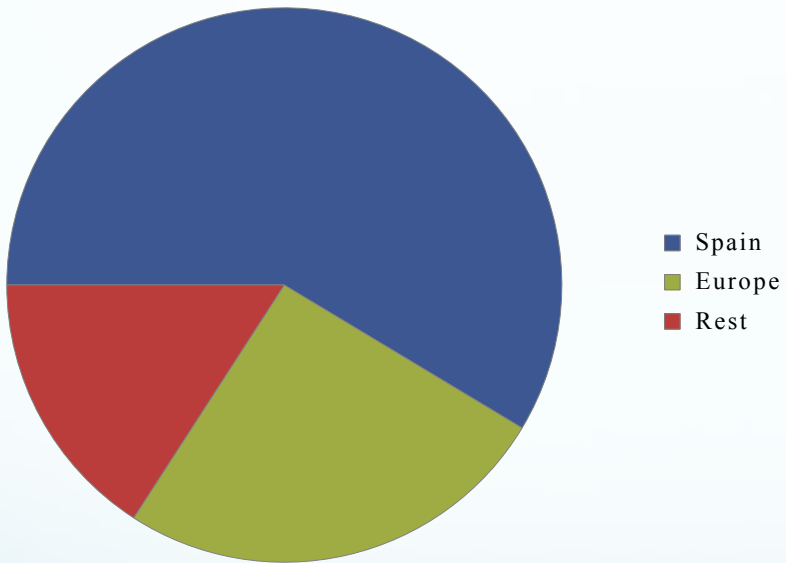
■ Spain  
■ Europe  
■ Rest



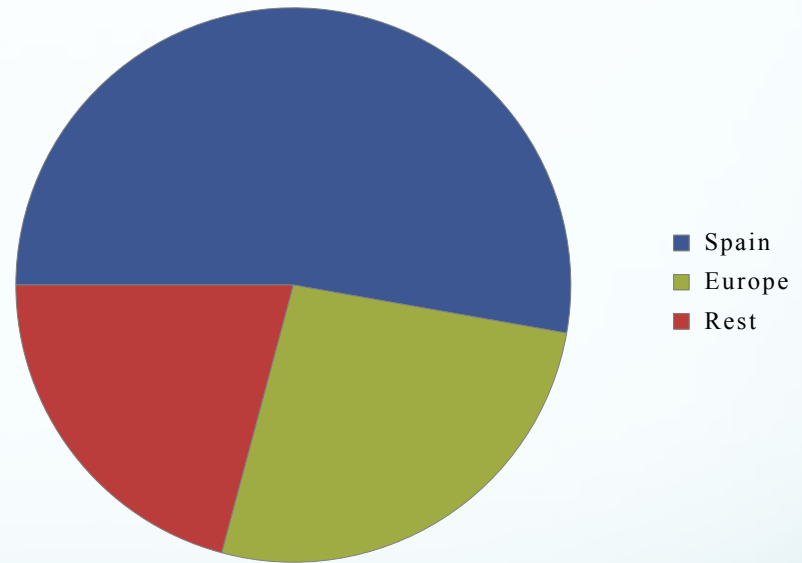
2026

■ Spain  
■ Europe  
■ Rest

# A spanish comparison

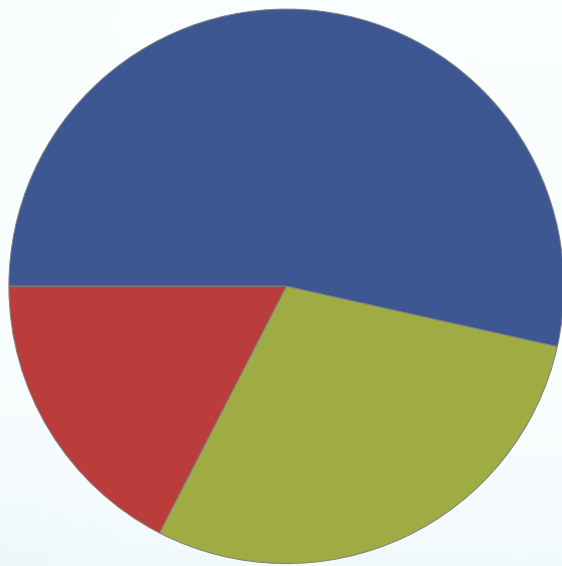


IFIC, theory only

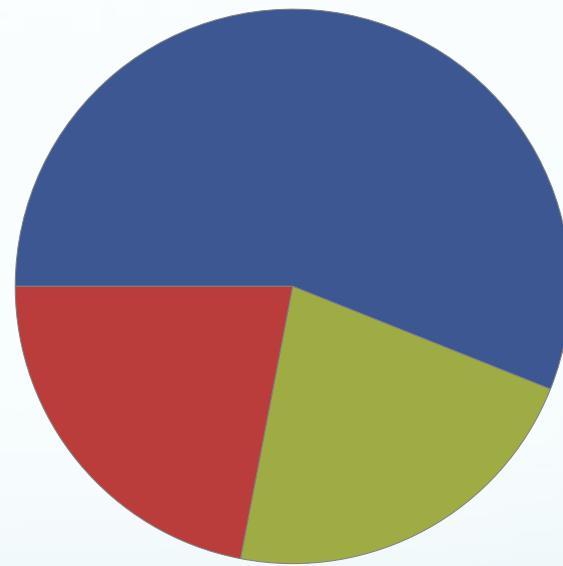


IFT (Madrid)

# A spanish comparison, 2



■ Spain  
■ Europe  
■ Rest

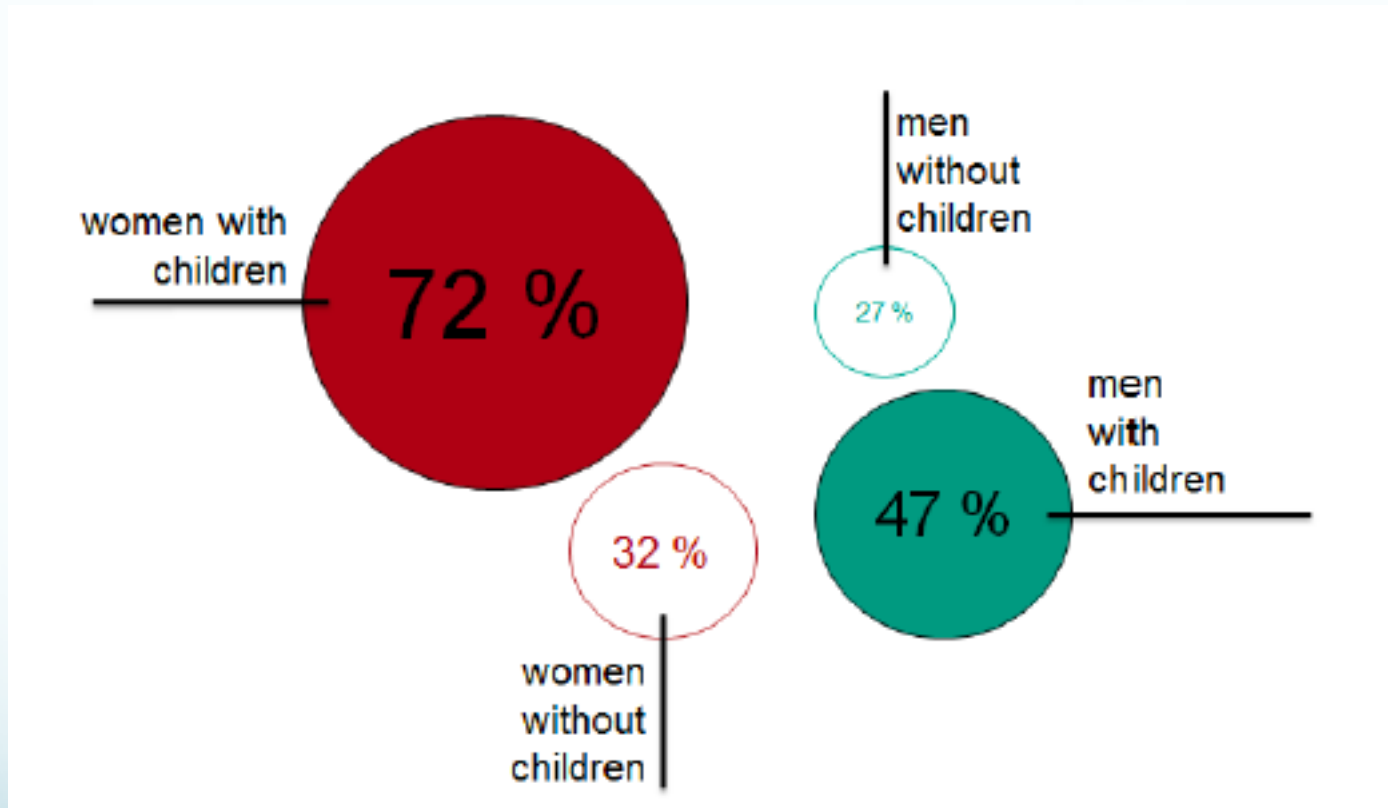


■ Spain  
■ Europe  
■ Rest

IFIC, theory only,  
PhD students

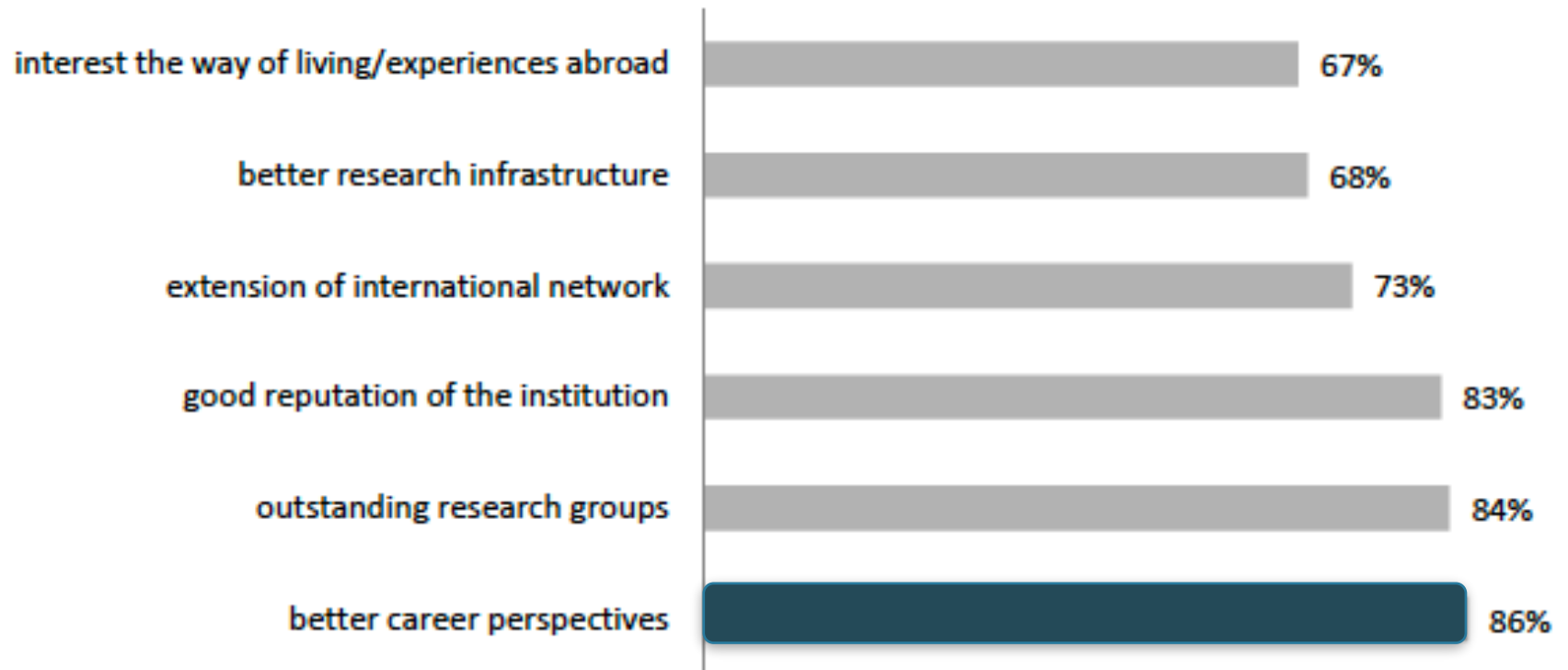
IFT (Madrid),  
PhD students

# Problems with international mobility in research

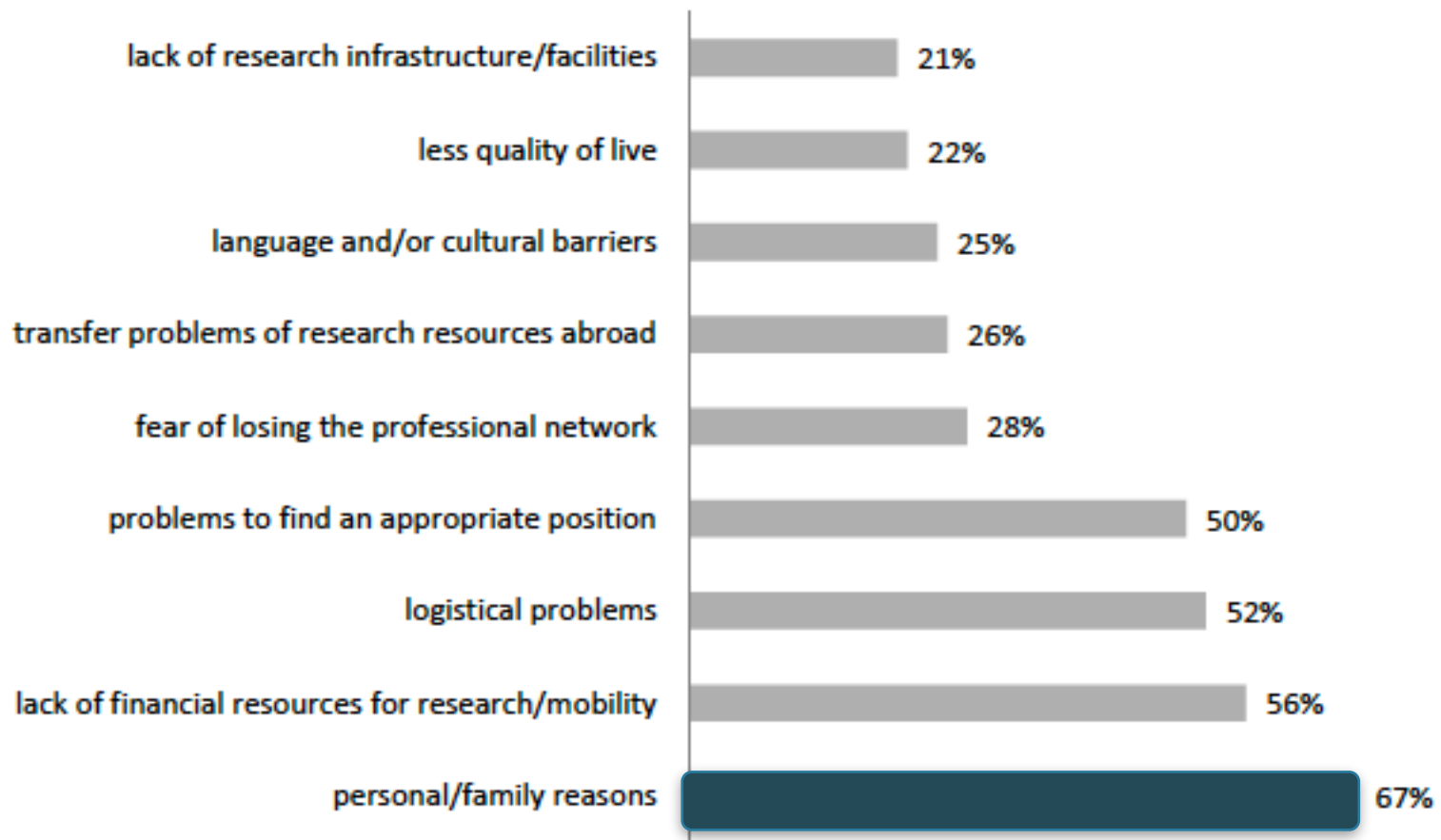


Percentage of researchers who consider reconciliation an obstacle

## Why do scientists go abroad?



# Why do scientists not go abroad?



# Culture and Science

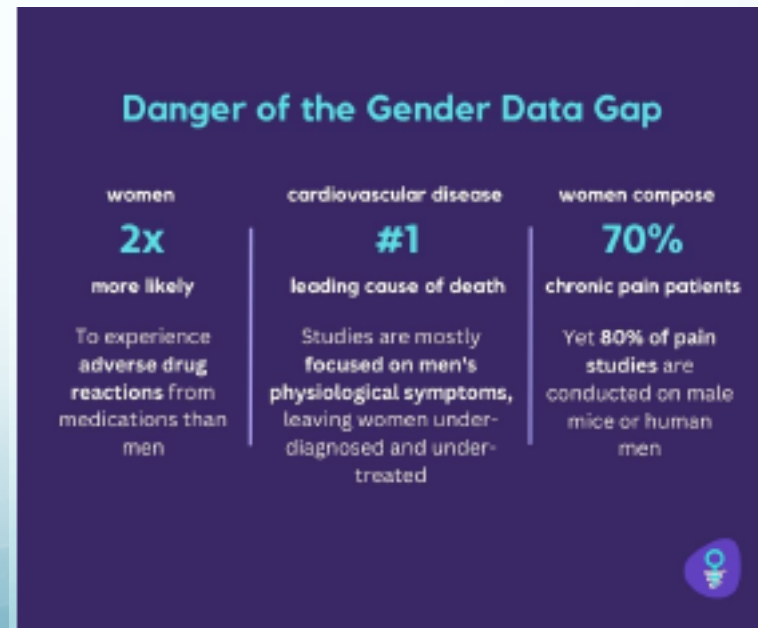
- It is easy to state the impact of “culture” without defining what a “culture” is in certain areas, such as ART



# Culture and Science

- However, does “**culture**” has an impact on SCIENCE?
  - Most of us will usually pretend that “Science” is objective and, therefore, universal....
  - However, we already know that biological sex may be an issue when testing drugs (i.e. Medicine is NOT universal)

WHAT ABOUT HARD SCIENCE?



# Physics and Gunpowder

## China

Discovery: Tang dynasty  
(IX century)

First chemical formula:  
Song dynasty (XI century)



## Europe

Brought during Mongol  
Invasions (XIII century)

Artillery: first cannons in  
1346



# Physics and nuclei

No need to put  
a picture here



# Physics and history

- The development of gunpowder brought interest in:
  - Kinematics
  - Ballistics
  - ....
- The development of nuclear bombs brought investment in:
  - Nuclear physics
  - High-energy physics
  - ....
- **HISTORICAL CONDITIONS DETERMINE WHICH PHYSICS WE ARE INTERESTED INTO**

# Physics and Culture

**Will CULTURAL  
DIVERSITY in Physics  
bring to different goals?**

# Physics and Language

- According to Yuval Noah Harari:

“The Chinese and Persians did not lack technological inventions such as steam engines... They lacked the values, myths, judicial apparatus and sociopolitical structures that took centuries to form and mature in the West...”

*Sapiens (2015)*

- However, according to Marshall McLuhan

“The Greeks invented both their artistic and scientific novelties **AFTER** the interiorization of the alphabet.”

*The Gutenberg Galaxy (1962), p. 66*

# Physics and language?

If typography favored the linear and analytical mindset that enabled modern Western science, the electronic age may privilege more holistic and relational modes of thought, potentially favoring cognitive traditions historically associated with Eastern cultures.