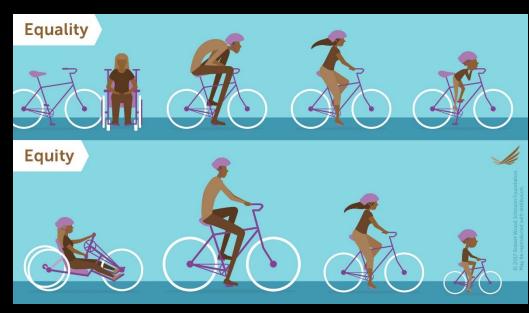


## **Equal opportunity in INFN**

Angela Badalà – INFN Sezione di Catania



@2017 Robert Wood Johnson Foundation

#### **Topics:**

- INFN
- INFN statistics
- Affirmative Plans and Gender Equality Plan
- Best Practices

#### The INFN missions



Pushing the frontiers of knowledge.
The secrets of the Big Bang

**Developing** 

new frontier technologies

**Training** 

the next generation of scientists and engineers

Working together

with researchers coming from all over the world

#### The Istituto Nazionale di Fisica Nucleare





The INFN is ...

a community of about 6,500 people

~2500 INFN staff + ~ 4000 associate personnel

**25%** of them have PhD grants, post-doc scholarships and research grants



#### Guarantee committee (CUG)

In 1999 INFN appointed its first **Equal Opportunity Committee**, currently this is the "Comitato Unico di Garanzia" (CUG).

The Garanteee Committee (*Comitato Unico di Garanzia, CUG*) has the task to propose actions to ensure gender equality, contrast job harassment and improve well-being at work.

It analyses sex disaggregated data, produces public annual reports to monitor the time evolution of gender gap, reviews procedures and practices to highlight gender inequalities and gender biases, proposes gender equality strategies and action plans. Identifying and removing structural barriers to enhance excellence, gender equality and efficiency in research and innovation



https://ec.europa.eu/research/sciencesociety/document\_library/pdf\_06/struct ural-changes-final-report en.pdf

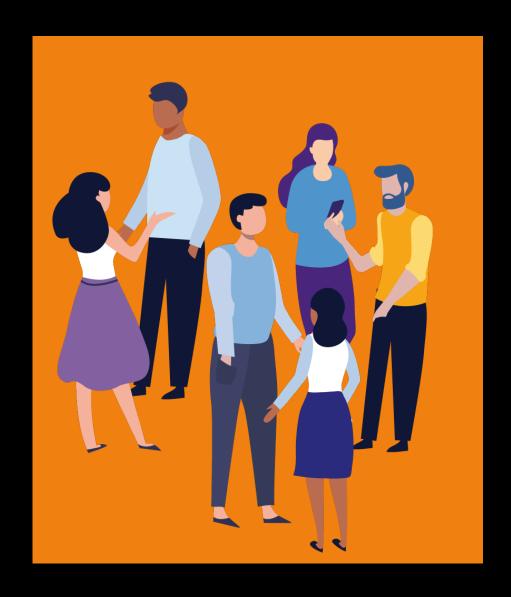
# Structural change in research institutions



Essential elements of structural change:

- Knowing the institutions by gender distributions to understand the real state of parity and to monitor in time the dis-parity and the real effects of affirmative actions (fix the numbers);
- Securing top-level support (fix the institutions);
- Generating effective management practices originating from knowledge and awareness of gender issues (fix the knowledge);





# Statistics of INFN staff at 31-12-2021

Analysis made by INFN-CUG and to be reported in "CUG Annual Report 2022"

#### **Women in INFN**

31-12-2021

Permanent Contract	ТОТ	M	F	F/TOT (%)
Researchers	661	512	149	
Technologists	392	316	76	
Technicians	619	582	37	6
Administratives	328	68	260	
TOTAL	2000	1478	522	26

Under-representantion of women in the roles of Researcher, Technologist and Technician. Administrative roles are traditionally considered female roles. Excluding administrative staff, women are 16% of permanent contract employees.



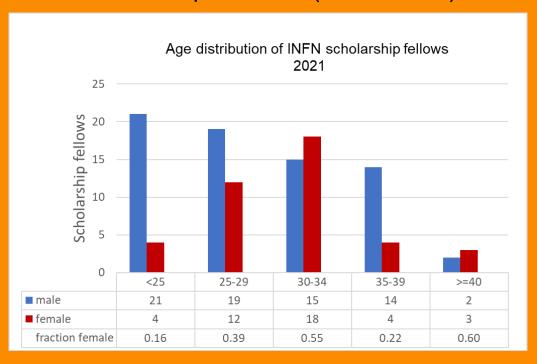
Fixed-Term Contract	ТОТ	M	F	F/TOT (%)	
Researchers	26	26	-	-	
Technologists	46	30	16	35	
Technicians	45	42	3	7	
Administratives	45	10	35	78	
TOTAL	162	108	54	33	

- Excluding administrative staff, women are
   12% of fixed term contract employees.
- All researcher with fixed-term contract have been selected with Fellini program, EU program, and are mainly theoreticians. No female researcher is present.
- Good fraction of female in technologist role.

#### INFN people in training

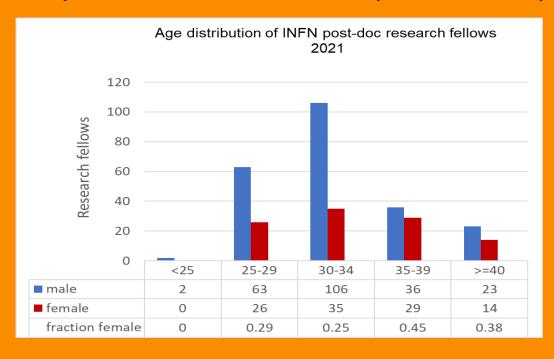


112 Scholarship fellows (41F + 71M)



50% of scholarship fellows is older than 30 years. Five people are older than 40 years. These people have a research grant. In 2021 new INFN rules have been approved to give research fellow to experienced people.

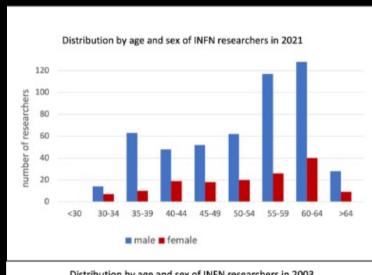
334 post-doc research fellows (104F + 230M)

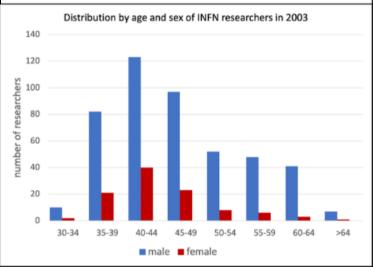


~ 11% of post-doc research fellows is older than 40 years

### Age of INFN staff



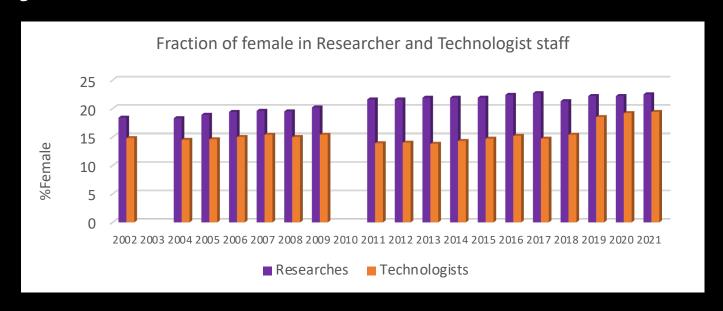




Role	Mean age (years)		
	M	F	
Researcher	53	53	
Technologist	50	48	
Technician	52	55	
Administrative	50	51	

The number of "young" female researchers is reduced respect to 2003. They are so few that in some INFN divisions there is none. This reduction is mainly connected to the results of recruitment procedures of last years.

# Fraction of female in researcher or technologist role with permanent contract in the last 20 years

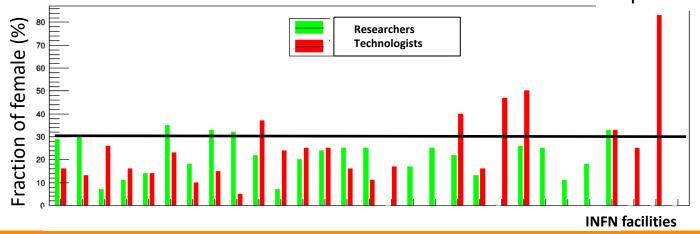


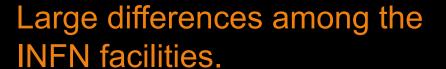


Researcher women: weak progress in 2002 - 2011. Technologist women: weak progress in recent years mainly connected to stabilization processes (change from fixed-term contract to permanent, imposed by law).

Communication department

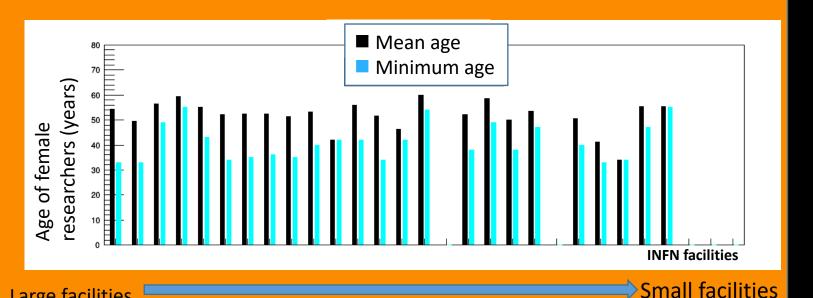






In few facilities/divisions female in researcher and technologist roles are ≥ 30%

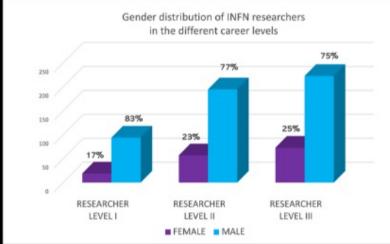
In some facilities, even large ones, few women and no young woman: Minimum age ~ Mean age.



Large facilities

A. Badalà

#### Fraction of male and female in Researcher and Technologist (R&T) career levels



Gender distribution of INFN technologists in the different career levels

77%

180

96%

17%

23%

TECHNOLOGISTS

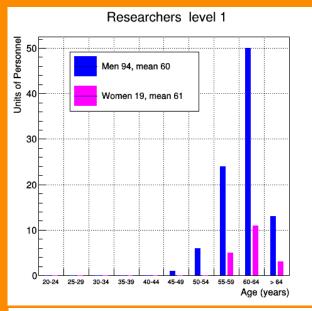
LEVEL III

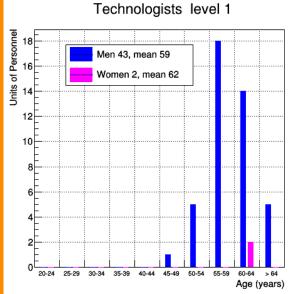
FEMALE MALE

Vertical segregation: fraction of women decreases at the highest career level

Women in the highest career level are older than men







#### Glass Ceiling index



Glass Ceiling Index (GCI) = total fraction female/ fraction female in first level

**GCI = 1 means gender parity** 



Mean Italian University = 1.6

Glass ceiling index INFN

Researchers 1.34

Technologists 4.4

### Glass Ceiling in INFN



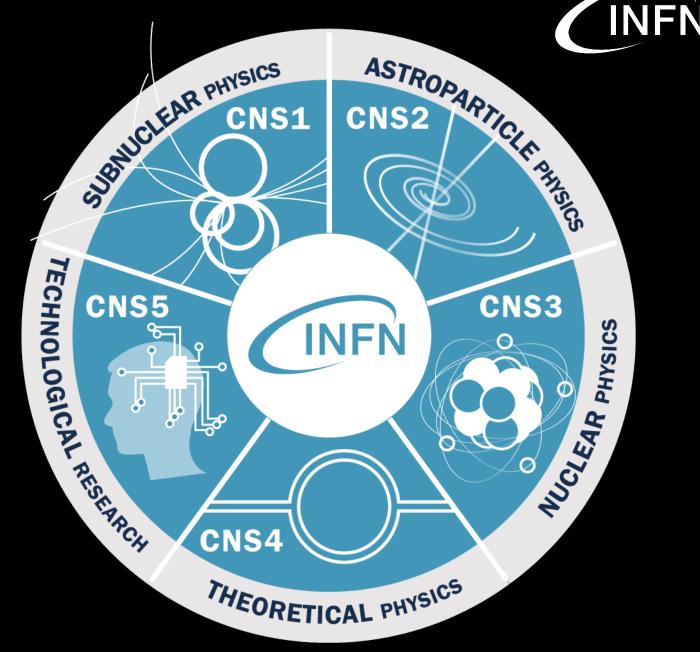
Profile / Level	Researchers			Technologists				
	М	M/TOT_ M	F	F/TOT_F	M	M/TOT_M	F	F/TOT_F
I	94	18%	19	13%	43	14%	2	3%
II	195	38%	57	38%	97	31%	20	26%
Ш	223	44%	73	49%	176	56%	54	71%
Total	512		149		316		76	

#### Researchers

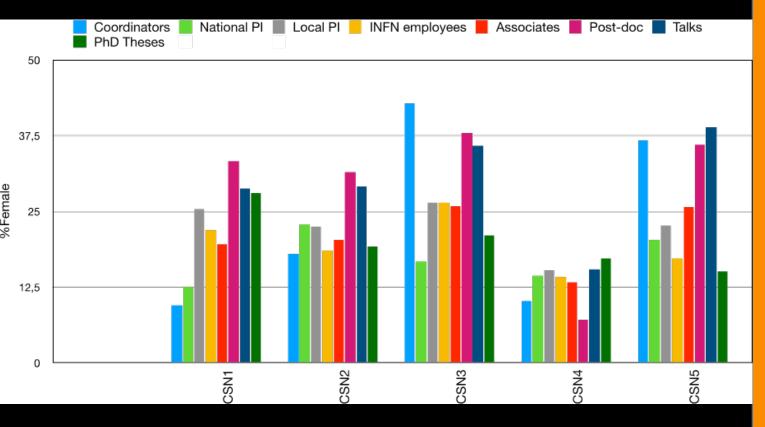
1 over 5 male arrive to the I (top) level 1 over 8 female arrive to the I (top) level

#### **Technologists**

1 over 7 male arrive to the I (top) level 1 over 33 female arrive to the I (top) level The 5 research lines and the National Scientific Committee



# Women in INFN National Scientific Committees

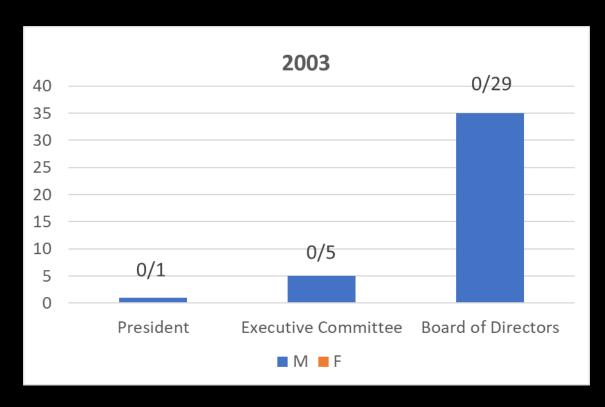


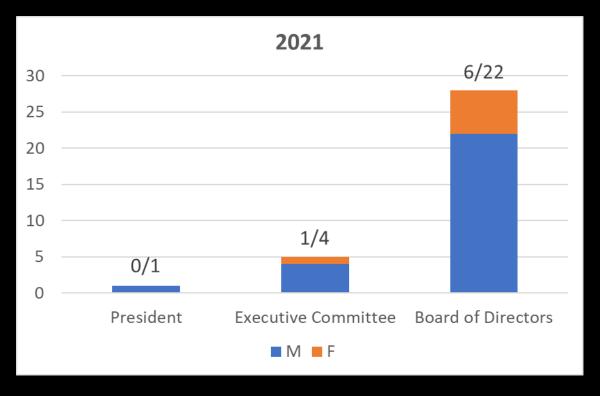


- Fraction of women with scientific responsibilities (national or local principal investigator or scientific coordinator) is larger or equal than the female fraction in the National Scientific Committees.
- Orizontal segregation: Fraction of women in Theoretical Physics Committee is lower than in other Scientific Committees.
- In the last years a decrease of the fraction of women with scientific responsabilities has been observed in NSC devoted to subnuclear physics.
- Fraction of female in post-doc positions is stable and it is > 30% (30% - 37%). In Theoretical Physics Committee it is lower than 10%.

#### Women in INFN leadership







In 2003 women were not present in the INFN govening body

In 2021 about 20% of the components of the INFN board of Directors is a woman.

Only one woman is part of the INFN Executive Committee.

No woman has ever been President of the INFN

# INFN Documents for gender equality CINFN

- Implementation of Affirmative Action Plans (Piano Triennale di Azioni Positive, PTAP) proposed by Equal Opportunity Committee (2002)
- Adoption of a specific Code of Conduct to prevent job harassment and in general behaviors which are against human dignity (2003). An external figure, the Confidential Counselor, ensures the application of the Code.
- Adoption of a Code of Ethics to which INFN people are required to comply in carrying out their work and of a Watchdog Committee of the Code
- Adoption of a first Gender Equality Plan (2022)



#### Affirmative Plans and GEP



#### **General objectives:**

- Increase transparency in decision-making processes and improve sharing of information
- Remove the apparently-neutral institutional practices that have a negative impact on women's careers
- Promote excellence by supporting parity and diversity
- Adopt gender and generational perspectives in research activity
- Improve people's life quality by acting on humanresources management and working atmosphere

The present INFN Affirmative Plan acts on the following areas:

- 1) Ensure basic components for structural changes (preparation of gender balance)
- 2) Training and outreach
- 3) Support maternity, ensuring parity and equal opportunity in recruitment and selection procedures, in appointment of decisional bodies, at every professional position and level
- 4) Adapt human-resources management and working atmosphere to the needs of people in their everyday life





Some PTAP objectives since 2020 are included in the INFN Performance Plan:

- Ensuring parity and equal opportunity: aiming at equal success rate for women and men in recruitment and selection procedures.
- Promoting women in decision making:
   ensuring a fraction ≥ 25 % of the under represented gender in scientific committees
   appointed by the Executive Committee. The
   value of the minimum fraction is increased each
   year. It is fixed to 30% for 2022.



#### Support to maternity



Italian law support maternity (and now also paternity) in different manner. Here only INFN supports are listed

- Covering maternal leave periods of post-doctoral researchers. During maternity leave a substance equal to 80% of the salary is paid by the Social Security. INFN covers the remaining 20%.
- Medical insurance which covers all the expenses connected to pregnancy and childbirth for all INFN staff extended to post-doctoral research fellows and scholarship fellows
- Preparation and distribution by CUG of a brochure including indications on how accessing to state and INFN benefits for motherhood.
- Economic support to INFN staff for nursery school and kindergarten cost, baby sitting expenses and in general school fees.







#### Some INFN achievements

- Awards reserved to female students working on theoretical physics
- A research mentoring program for women and recently also for men (talk today by Sabina Pellizzoni);
- Preparation (by CUG) of a brochure "Unconscious Bias and Discrimination" whose compliance is mandatory for all components of recruitment and selection INFN panels



# Work -life compatibility

In Italy there are different instruments to assure work-life compatibility to the employers: teleworking, part-time and smart working. All are active in INFN, which has also adopted a flexible working time model. Smart working has been (is) extensively used in this pandemic period.



# **Society activities**

INI

Organization of training courses on equal opportunity and parity in research, training courses to prevent discrimination and harassment and events to prevent violence against women (Target INFN staff + associate personnel)

Organization of outreach events and Science and society activities







INFN guarantees parity and equal opportunity and recognizes the decisive contribution of women to the excellence of the Institution





INFN guarantees parity and equal opportunity and recognizes the decisive contribution of women to the excellence of the Institution

#### Thanks



# Thanks

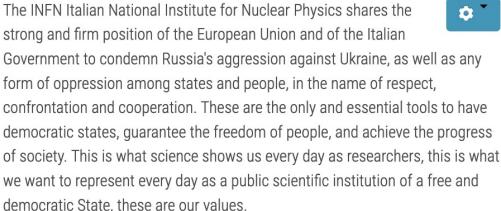


## INFN FOR UKRAINE



#### THE INFN MESSAGE FOR UKRAINE





In this deeply dramatic moment, which leaves all of us bewildered by its senselessness and brutality, we express our full solidarity with the Ukrainian people. And we assure our willingness to support the initiatives for peace and in support of people in difficulty that will be promoted by the Italian Government and the Ministry of University and Research. We are working to offer support to our Ukrainian colleagues with welcoming initiatives, and we will help to spread initiatives to help the Ukrainian population promoted by our local structures, our staff and the scientific community. INFN will also be aligned with the decisions of the Government and the Ministry of University and Research regarding the management of international scientific collaborations involving Russia. We would also like to express our deep sadness for the condition of Russian colleagues and their fellow citizens who suffer the tragic choices of their government. Science has been, is and will always continue to be, by its very nature, a place of freedom and a ground for dialogue and collaboration among people: we believe in this, as people and as scientists, and we work for this as INFN.

#### **INFN INITIATIVES IN SUPPORT OF UKRAINE**

**SUM-Save the Ukraine Monuments Project** 

CALL FOR APPLICATIONS for research grants to support Ukrainian scientists for research grants to support Ukrainian scientists





#### **SOME USEFUL LINKS**

INFN ALLOCATES THE FIRST FUNDS TO HOST SCIENTISTS AFFECTED BY THE WAR

THE CALL FOR UKRAINIAN RESEARCHERS AND TECHNOLOGISTS IS NOW OPEN

**TEXT OF THE CALL AND HOW TO APPLY** 

**SAVE THE UKRAINE MONUMENTS**