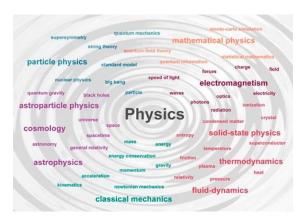




# What is **GENERA** and why this **Gender-in-Physics day?**



by Job de Kleuver FOM Dutch Gender-in-Physics Day Amersfoort – November 1, 2016



Thanks to GENERA colleagues for using some of their slides





### Brussels 1927



# Marie Curie and 28 men

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### Physics@FOM Veldhoven



### 17 out of 135 (= 12,5%) women in physics research





# Why me?





### **GENERA** Consortium

GENERA	Partner
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DESY
FOM
КІТ
PORTIA Ltd.
INFN
MPG
JOANNEUM
IAC
UNIGE
CNR

Germany (Coordinator) Netherlands Germany Italy Germany Austria Spain Switzerland

### **GENERA** Partner IFIN-HH UJ **CNRS**

**Associated Partner** Helmholtz Association Germany Ireland DIAS Donne e Scienza Italy

Rumania

Poland

France

**GENERA Observers** CERN NORDFORSK ESO



he research leading to these results has received funding from the European Union's Horizon 2020 Research and Innovation Programme, under Grant Agreement no 665637.

UK

Italy



# GENERA

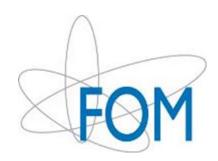


- 1. Assess the present status of GEPs and their implementation through analysis in the partner organizations and countries
- 2. Propose a common framework of gender related statistical data to compare different organizations with a monitoring system
- 3. Organize a series of Gender in Physics Days in partner countries/institutions, raising awareness on gender equality and announce European wide action in GENERA
- 4. Interview successful individual physicists to identify gaps in existing GEPs and national or local policies

5. Help organisations and institutions to develop tailored GEPs







WP5:Forming an Alliance of RPOs and RFOs Addressing Gender in Physics

- 1. Extension of the GENERA network to other RFO's and RPO's in Europe
- 2. Preparation of a framework for the implementation of a sustainable long-term monitoring of the effectiveness of GEPs







# GENERA after 3 years....

- European approach to Gender Equality in Physics
- Exchange 'good actions'
- Tailored GEPs and support for institutions
- Monitoring system Gender equality progress
- Network of RPOs and RFOs
- More women in Physics!





**Gender-in-Physics Day** 



- Overview current policies and actions
- Importance of Gender Equality Plans
- FOM and universities: one physics community
- Collect recommendations for GEPs
- Impress our GENERA friends 😳









Outcome	Tailored and targeted Gender Equality Plans		
Building blocks	Roadmap	Toolbox	
	Data and best practices	Monitoring	
Foundation	Common understanding of the outputs or a 'frame'		





# Gender Equality Plan



- Evidence-based
- Tailored to the organizational context
- Clearly formulated definitions and solutions
- Integrated into structures and implemented following clearly defined steps
- Based on targets; monitored via indicators

'A Reinforced European Research Area Partnership for Excellence and Growth' (COM(2012) 392 final)



# Fields of Action: Examples

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Recruitment procedures	Structural integration of gender equality	Accountability	Stakeholder Management	Monitoring	Child-care
Reconciliation	Work-life balance	Gender-inclusive culture	Specific and tailored GEPs	Gender-sensitive training	Research Funding
Implicit bias	Gender awareness	Retention	Gender Pay Equity	Flexibility	Deconstructing excellence
Visibility	Balanced composition of boards	Gender dimension in research	Engagement of decision-makers	Gender Mainstreaming	Sustainability



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# **GENERA** Fields of Action



Gender-Recruitment and Gender inclusive/gender-Structural Flexibility, time visibility of dimension in Engaging Integration of sensitive and work life Leadership female research and **Gender Equality** organizational researchers education culture Gender Leadership Work-life Policies Recruitment Awareness and Knowledge accountability balance Bias Stakeholder Care & Family-Non-Monitoring Retention Research life discrimination engagement Deconstructing Sustainability Visibility Funding Excellence Gender Composition



#	Field of Action	Sub-field of Action	Example areas/topics/issues		
		Policies	- Gender Mainstreaming	- Gender Equality Plans	
	1 Structural integration of gender equality	Monitoring	- Surveys - Evaluation of gender/HR policies	- Gender equality monitoring system	
1		Sustainability	<ul> <li>Long-term planning</li> <li>Setting of aims and targets</li> </ul>	- Continuation of efforts even when specific goals/targets are reached	
		Gender Composition	- Gender competent composition of boards, bodies, committees, staff, etc.	- Enhancing the position of GE actors	
2	Facesian Londowskin	Leadership accountability	- Leadership accountability	- Manager and leader (gender) competence	
	Engaging Leadership	Stakeholder Engagement	- External Stakeholders engagement	- Employee awareness and engagement	
3	3 Flexibility, time and work life	Work-life balance	<ul> <li>Working time</li> <li>Pressure and myth of dedication being equal to time spend</li> </ul>	<ul> <li>Team and cooperation</li> <li>Flexitime</li> <li>Telework</li> </ul>	
		Care & Family life	<ul> <li>Child-care availability and funding</li> <li>Child-care tailored to physicists needs</li> </ul>	<ul> <li>Non-discrimination of parents</li> <li>Support of other caring activities</li> </ul>	
	4 Recruitment and visibility of female researchers	Recruitment	<ul> <li>Transparency of selection procedures</li> <li>Trainee programme for potential female leaders</li> </ul>	<ul> <li>Equal treatment of part-time work</li> <li>Career and life planning</li> </ul>	
4		Retention	<ul> <li>Career progression/leaky pipeline</li> <li>HR development</li> <li>Education and qualification</li> </ul>	- Equal pay - Job security	
		visibility	<ul> <li>Role models/representation (e.g. website)</li> <li>Networking/mentoring</li> </ul>	<ul> <li>Gender-sensitive language</li> <li>Sex-equal speakers lists</li> </ul>	
	5 Gender inclusive/ gender-sensitive organisational culture	Gender Awareness and Bias	- Gender stereotypes - Implicit bias training	<ul> <li>Leadership training</li> <li>Employee training</li> <li>Incorporate implicit bias statements</li> </ul>	
5		Non discrimination	<ul> <li>Zero Tolerance Sexual Harassment policies</li> <li>Equal treatment of part-time work</li> </ul>	- Policy of overall non-discrimination	
		Deconstructing Excellence	<ul> <li>Transparency of selection criteria</li> <li>Pressure (quantity/quality)</li> </ul>	- Seminars exploring how excellence expectations are gendered	
		Knowledge	- Inclusion of gender studies in all curricular	- Gender awareness trainings	
6	Gender dimension in research and	Research	- Inclusion of gender dimension in research	- Science case for gender equality	
	education	Funding	- Inclusion of gender-related selection criteria	- Unconscious bias training for review committees	



### Gender bias







# Gender bias



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# Science faculty's subtle gender biases favor male students

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Edited\* by Shirley Tilghman, Princeton University, Princeton, NJ, and approved August 21, 2012 (received for review July 2, 2012)

Despite efforts to recruit and retain more women, a stark gender disparity persists within academic science. Abundant research has demonstrated gender bias in many demographic groups, but has yet to experimentally investigate whether science faculty exhibit a bias against female students that could contribute to the gender disparity in academic science. In a randomized double-blind study (n = 127), science faculty from research-intensive universities

gender disparity in science (9–11), and that it "is not caused by discrimination in these domains" (10). This assertion has received substantial attention and generated significant debate among the scientific community, leading some to conclude that gender discrimination indeed does not exist nor contribute to the gender disparity within academic science (e.g., refs. 12 and 13). Despite this controversy, experimental research testing for the

### reactions to the male student. These results suggest that interventions addressing faculty gender bias might advance the goal of increasing the participation of women in science.

as less competent. We also assessed faculty participants' preexisting subtle bias against women using a standard instrument and found that preexisting subtle bias against women played a moderating role, such that subtle bias against women was associated with less support for the female student, but was unrelated to reactions to the male student. These results suggest that interventions addressing faculty gender bias might advance the goal of increasing the participation of women in science.

diversity | lifestyle choices | science education | science workforce

qualified male and female student, science faculty members would show preferential evaluation and treatment of the male student to work in their laboratory. Although the correlational and related laboratory studies discussed below suggest that such bias is likely (contrary to previous arguments) (9–11), we know of no previous experiments that have tested for faculty bias against female students within academic science.

If faculty express gender biases, we are not suggesting that these biases are intentional or stem from a conscious desire to impede the progress of women in science. Past studies indicate that people's behavior is shaped by implicit or unintended biases,



# Actions for today



### Be active and reflective!





**Directors and HR officers** 

### Senior and junior researchers



### What can I do myself?





Movie



### Focus on the people with the white coloured shirts and

### COUNT how often the pass the ball

https://www.youtube.com/watch?v=IGQmdoK\_ZfY





### Back-up slides





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# ERC Gender Equality Plan



### > Fundamental principle

Women and men are equally able to perform excellent frontier research.

### > Aim

Take into account and confront structural gender differences, so that the ERC can fulfil its mission to support top talent in frontier researchers across Europe, irrespective of gender, nationality or age.

### > Objectives

- Raising awareness about ERC gender policy amongst potential applicants and improving the gender balance among ERC applicants.
- Identifying and challenging any potential gender bias in the ERC evaluation procedure.
- Achieving gender balance amongst ERC peer reviewers and other relevant ERC decision-making bodies in the medium term.

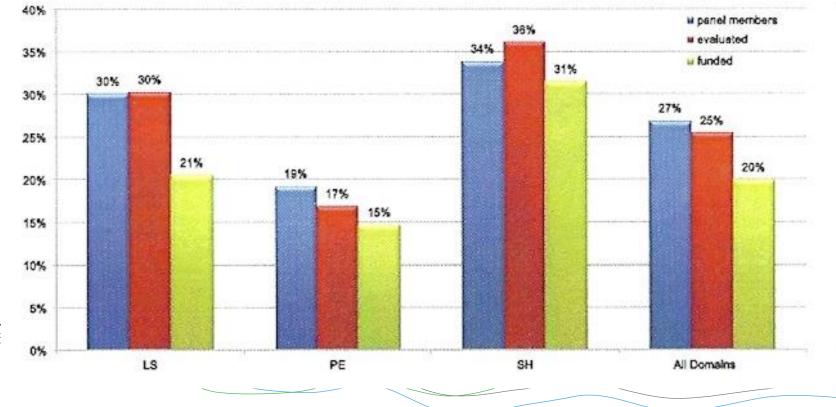








### 3. Share of women panel members, evaluated and funded applicants ERC calls 2007-2012 (AdG2012 grantees not included)







# **PNAS** gender bias



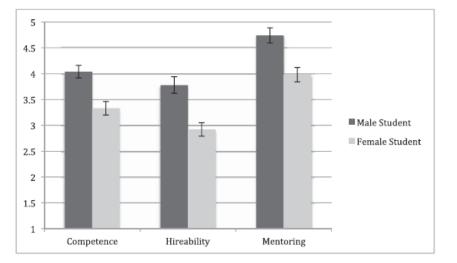


Fig. 1. Competence, hireability, and mentoring by student gender condition (collapsed across faculty gender). All student gender differences are significant (P < 0.001). Scales range from 1 to 7, with higher numbers reflecting a greater extent of each variable. Error bars represent SEs.  $n_{male student condition} = 63$ ,  $n_{female student condition} = 64$ .

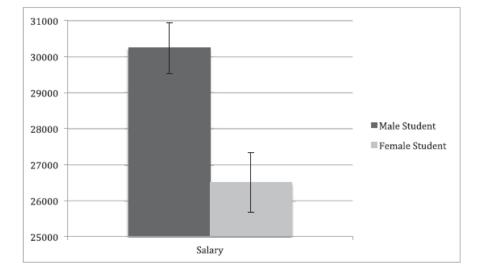
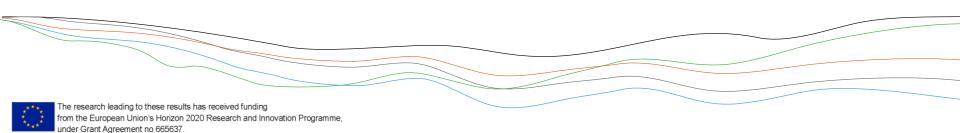


Fig. 2. Salary conferral by student gender condition (collapsed across faculty gender). The student gender difference is significant (P < 0.01). The scale ranges from \$15,000 to \$50,000. Error bars represent SEs.  $n_{\text{male student condition}} = 63$ ,  $n_{\text{female student condition}} = 64$ .





# **Implicit Association Test**



