



**A Global Approach to the Gender Gap
in Mathematical, Computing and Natural Sciences:
How to Measure It, How to Reduce It?**

Roundtable in SISSA

**The gender gap in science
in Europe and North America**

6 November 2019

**Marie-Françoise Roy, IMU
Coordinator of the project**

The participants to the ICTP Conference

More than 100

Coming from 60 different countries

All continents

**Several scientific disciplines : mathematics
(including applied), physics, astronomy, computer
science, biology, chemistry, history of sciences**

90 % female

What is the Gender Gap ?

Gap between women and men interms of their levels of participation, access to career-advancing opportunities and resources, rights, remuneration or benefits.

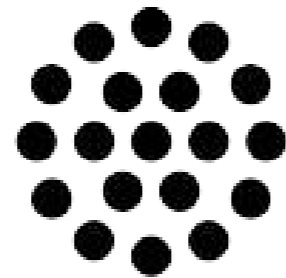
How to measure it and to reduce it in Science ?

What is the Gender Gap in Science Project ?




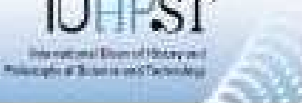


3 Tasks

- Task 1: Joint global survey
- Task 2: Joint data-backed study on publication patterns
- Task 3: Database of good practices for girls and young women, parents, and organizations

Funding and Partner Organizations



International Science Council

	International Mathematical Union
	International Union of Pure and Applied Chemistry
	International Union of Pure and Applied Physics
	International Union of History and Philosophy of Science and Technology
	International Astronomical Union
	United Nations Educational, Scientific and Cultural Organization

	International Union of Biological Sciences
	Gender in Science, Innovation, Technology and Engineering
	International Council for Industrial and Applied Mathematics
	Organization for Women in Science for the Developing World
	Association for Computing Machinery

Main preoccupations

By geographical zone

By development level

By discipline

What are the Recommendations of the Gender Gap Project ?

Preliminary recommendations in the Report

for instructors and parents

for local institutions

for national (and beyond) organizations

Discussed in an interactive way during the World Cafe

Part of the last session on friday

The gender gap in science in Europe and North America

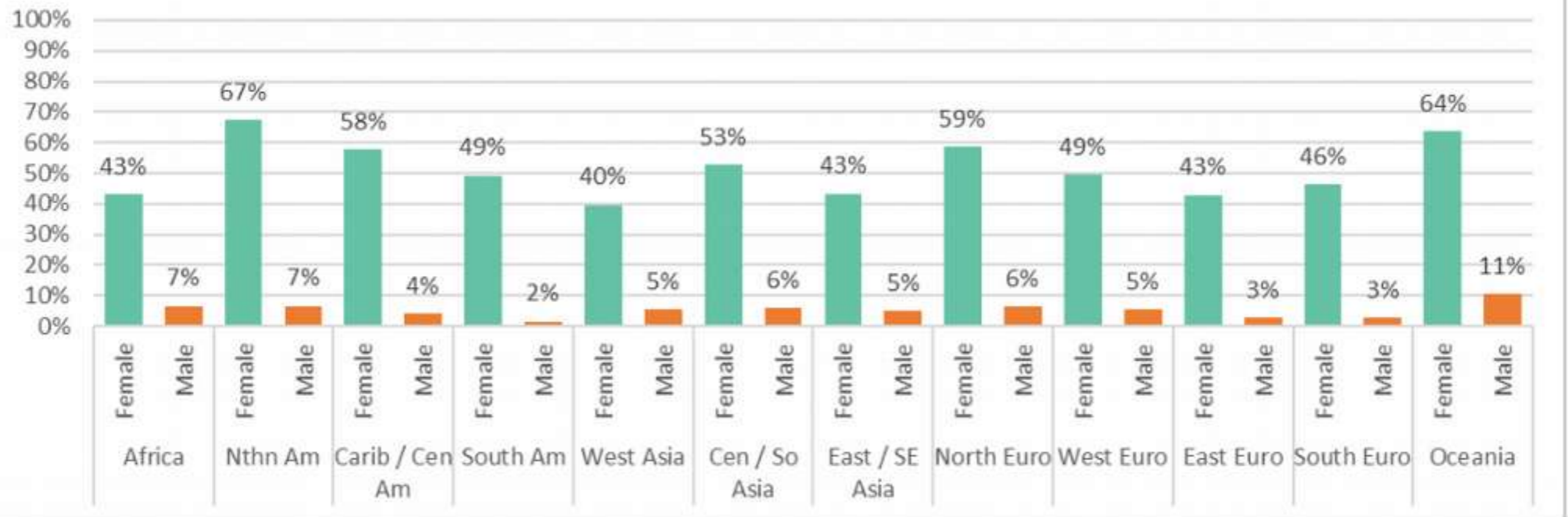
SISSA is a coorganizer of the ICTP
conference

At ICTP we already discussed the
situation in

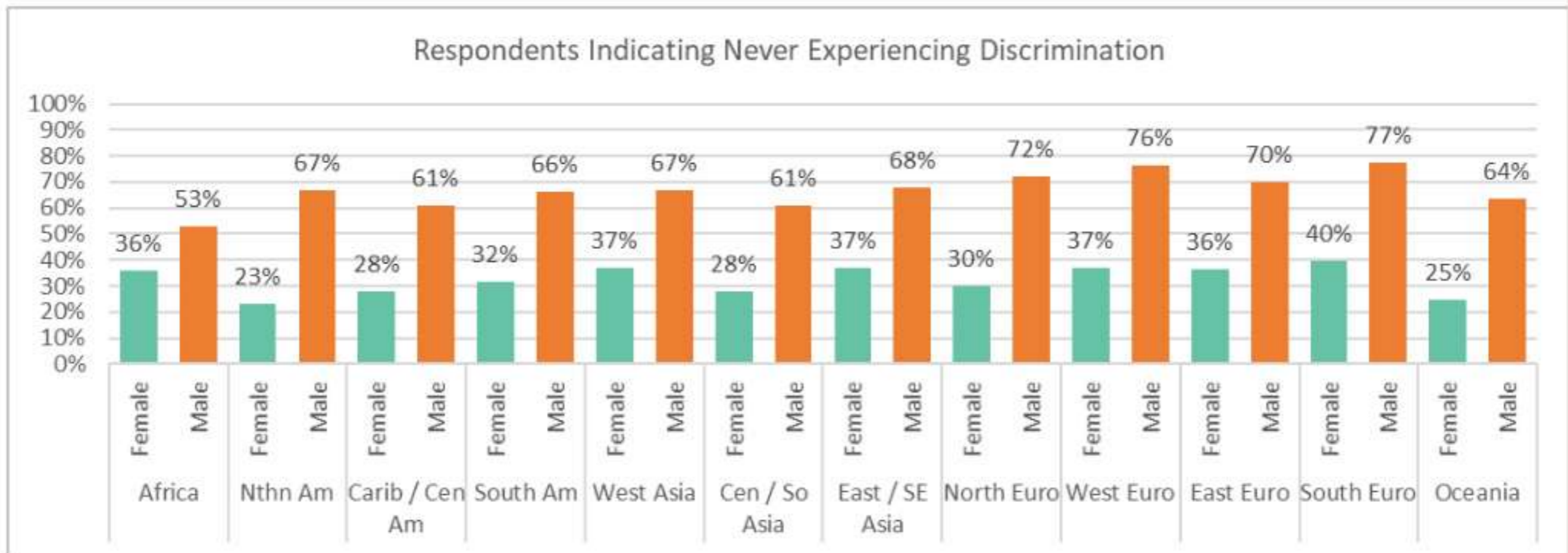
Africa, Asia, Latin-America,
More/Less developed countries,
By disciplines

From the Global Survey of Scientists

Respondents Indicating Feeling Discriminated Against in the Assessment or Evaluation of Achievements because of Their Gender

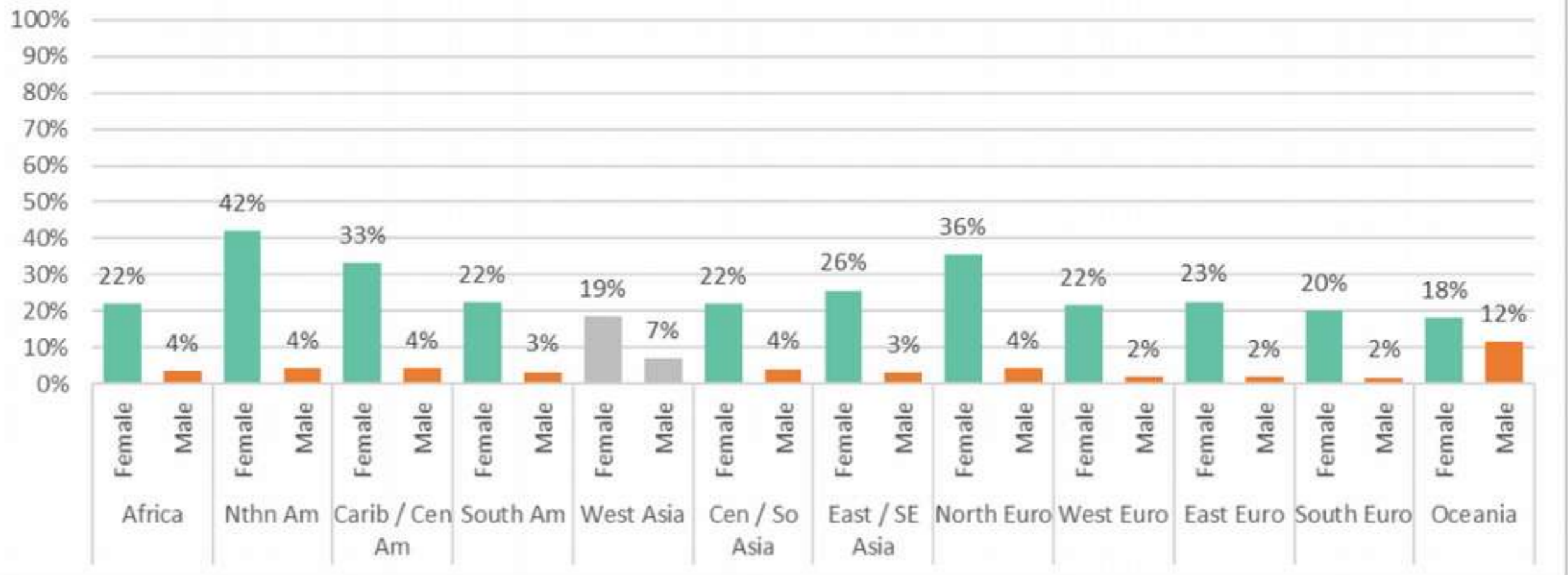


From the Global Survey of Scientists



From the Global Survey of Scientists

Respondents Indicating They Personally Encountered Sexual Harassment at School or Work



From the Global Survey of Scientists

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By disciplines

From the Publication Patterns

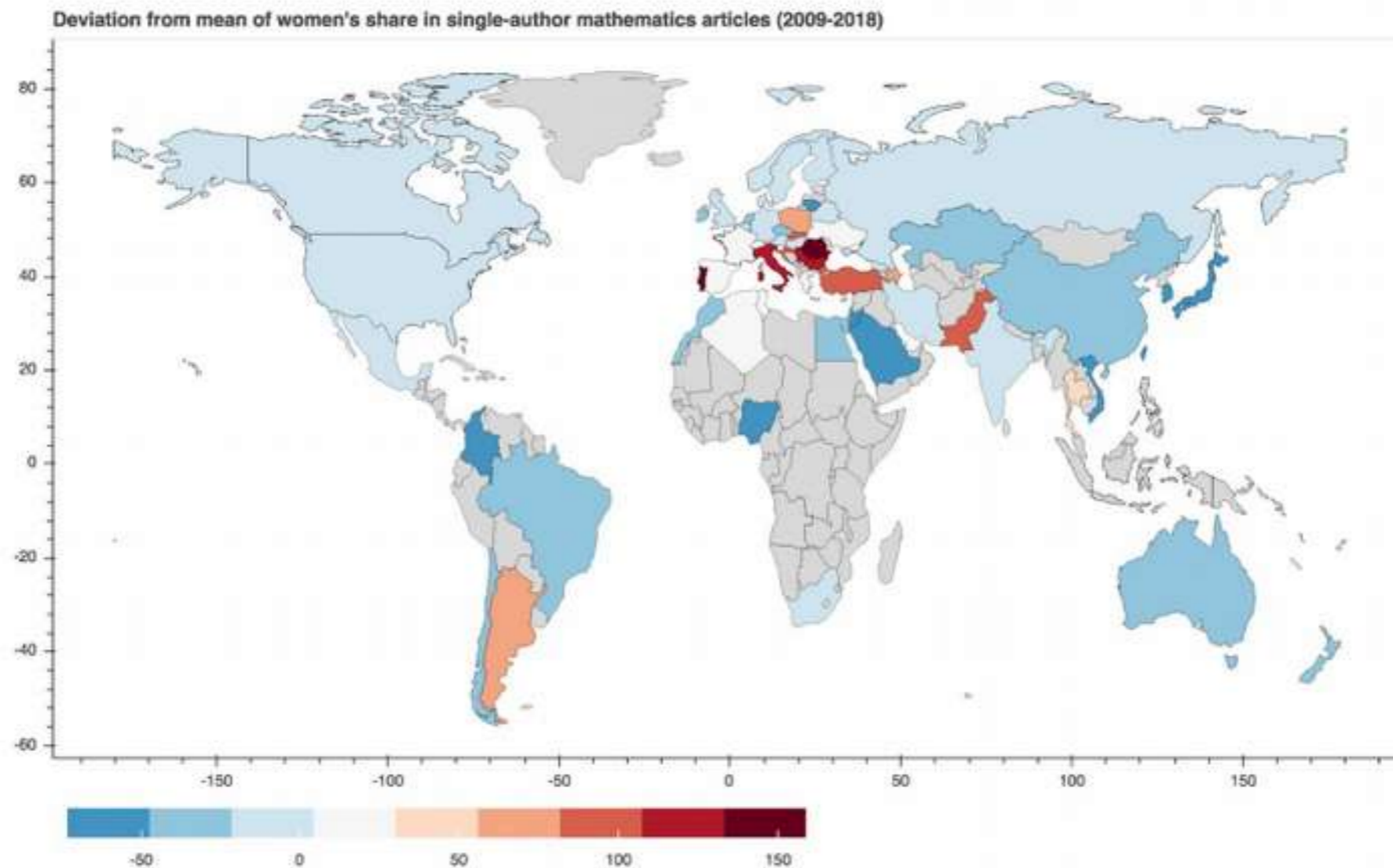


Figure 22: Deviation from the average proportion of women in single-author mathematics publications from zbMATH's Core Math data set in 2009-2018 broken down by the authors' countries of work.