Women in Mathematics in Germany

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University of Konstanz

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Distribution of female researchers in Germany

Share of female researchers per state/NUTS1 region (left) and per government region/NUTS2 region (right); all subjects; for Germany; 2010-2014.
Distribution of female researchers in Germany

In general, Agriculture, Medicine, and Health related subject areas have the highest share of female researchers.

Subject areas in the Natural Sciences and Engineering have the lowest shares.
Distribution of female researchers in Germany

In general, Agriculture, Medicine, and Health related subject areas have the highest share of female researchers.

Subject areas in the Natural Sciences and Engineering have the lowest shares.

<table>
<thead>
<tr>
<th>SHARE OF FEMALE RESEARCHERS</th>
<th>2010</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>All subjects</td>
<td>28.2%</td>
<td>30.9%</td>
</tr>
<tr>
<td>Mathematics</td>
<td>14.0%</td>
<td>16.2%</td>
</tr>
</tbody>
</table>
A general good trend in the Math Departments:
full-time academic staff in Mathematics from 2005 to 2014

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Women</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>4091</td>
<td>676</td>
<td>16.5</td>
</tr>
<tr>
<td>2006</td>
<td>4115</td>
<td>703</td>
<td>17</td>
</tr>
<tr>
<td>2007</td>
<td>4249</td>
<td>788</td>
<td>18.5</td>
</tr>
<tr>
<td>2008</td>
<td>4518</td>
<td>871</td>
<td>19.3</td>
</tr>
<tr>
<td>2009</td>
<td>4710</td>
<td>921</td>
<td>19.5</td>
</tr>
<tr>
<td>2010</td>
<td>5027</td>
<td>1012</td>
<td>20.1</td>
</tr>
<tr>
<td>2011</td>
<td>5249</td>
<td>1111</td>
<td>21.2</td>
</tr>
<tr>
<td>2012</td>
<td>5510</td>
<td>1186</td>
<td>21.5</td>
</tr>
<tr>
<td>2013</td>
<td>5724</td>
<td>1275</td>
<td>22.2</td>
</tr>
<tr>
<td>2014</td>
<td>5770</td>
<td>1342</td>
<td>23.2</td>
</tr>
</tbody>
</table>
A critical career point: postdoc -> professor
Habilitations in Mathematics from 2005 to 2014

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<tr>
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<th>Total</th>
<th>Women</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>62</td>
<td>11</td>
<td>17.7</td>
</tr>
<tr>
<td>2006</td>
<td>43</td>
<td>6</td>
<td>13.9</td>
</tr>
<tr>
<td>2007</td>
<td>44</td>
<td>6</td>
<td>13.6</td>
</tr>
<tr>
<td>2008</td>
<td>50</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>2009</td>
<td>48</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>2010</td>
<td>42</td>
<td>11</td>
<td>26.2</td>
</tr>
<tr>
<td>2011</td>
<td>43</td>
<td>5</td>
<td>11.6</td>
</tr>
<tr>
<td>2012</td>
<td>33</td>
<td>5</td>
<td>15.2</td>
</tr>
<tr>
<td>2013</td>
<td>31</td>
<td>7</td>
<td>22.6</td>
</tr>
<tr>
<td>2014</td>
<td>38</td>
<td>5</td>
<td>13.1</td>
</tr>
</tbody>
</table>
### Distribution of Women in Maths in 2014 per study/academic career stage

<table>
<thead>
<tr>
<th>Category</th>
<th>Total</th>
<th>Women</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students enrolled</td>
<td>33728</td>
<td>72391</td>
<td>46.6</td>
</tr>
<tr>
<td>Bachelors completed</td>
<td>2665</td>
<td>1020</td>
<td>38.2</td>
</tr>
<tr>
<td>Masters completed</td>
<td>1117</td>
<td>395</td>
<td>35.4</td>
</tr>
<tr>
<td>PhD completed</td>
<td>562</td>
<td>132</td>
<td>23.5</td>
</tr>
<tr>
<td>Fixed-term researchers (e.g. postdocs, fixed-term lecturer)</td>
<td>3697</td>
<td>905</td>
<td>24.5</td>
</tr>
<tr>
<td>Professors (tenured and non)</td>
<td>1247</td>
<td>185</td>
<td>14.8</td>
</tr>
</tbody>
</table>

**Gender distribution in Mathematics per study/academic stage**

[Bar chart showing the distribution of men and women across different academic career stages.]
Female Professors in Mathematics in German universities

- 0 female professor
- 0 female tenured professor, but 1 – 2 female non-tenured professors
- 1 – 2 female professors, at least 1 tenured
- ≥ 3 female professors, at least 2 tenured
European Women in Mathematics (EWM)

- created in 1986, after the participation of many European mathematicians to a roundtable organized at the ICM in Berkeley by the AWIM.
- 400 members and coordinators in more than 30 countries.
- aims: encouraging women to study mathematics, supporting women in their careers, giving scientific visibility to female mathematicians
- sponsors: meetings, lectures, initiatives to promote equal opportunity and spread the awareness of the gender gap in academia
- biennial general EWM meeting
Associations and activities focused on advancing WIM
European level

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EWM/EMS Scientific Committee
- established in 2008
- aim: advising EMS and EWM on scientific programmes and speakers for events aimed at emphasizing women’s scientific contributions.

Example: The EMS/EWM Survey Lectures 2016 at 7ECM 2016 in Berlin
German Section of European Women in Mathematics

- exists since the early days of EWM
- 50 members
- newsletter with information on job ads and other matters of interests for WIM
- annual national meeting *German Chapter of EWM* (next meeting in 2017)
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DMV Diversity and Equal Opportunities Division
The German Mathematical Society (DMV) has Diversity and Equal Opportunities as one of its fields of activities and cooperates closely with the German section of EWM.

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Emmy Noether Lectures

initiated by the DMV Diversity and Equal Opportunities representative in 2008. In the annual DMV conference, DMV honours the work of a female mathematician (German or working in Germany) by inviting her to give a distinguished keynote lecture.
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**Arbeitskreis Frauen und Mathematik**
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- mainly concerned with in gender-specific issues in math education
- annual meeting organized every autumn
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Several thematic local meetings aimed to encourage female researchers working in a particular math area.
**Konstanz Women in Maths (KWIM)**

- project supported by the Equal Opportunity Division of the University of Konstanz since May 2013.
- aim: promoting female mathematicians in their paths in studies and career, being a counseling by women for women.

**KWIM Activities:**

- a lecture series aimed to present mathematical results/biographies of female mathematicians and/or their experience in academia.
- annual meeting in Konstanz
- participation of local female researchers/students in national and international meetings in the framework Women in Mathematics
Thank you for your attention

Sources:
- Mapping Gender in the German Research Arena, Elsevier’s Analytical Services.
- Map of female professors in Mathematics in Germany, Christine Bessenrodt.
- Bildung und Kultur, Fachserie 11, Reihe 4.2 und 4.4, DESTATIS, German Federal Statistical Office.

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