



Newsletter 28

Edited by Anna Maria Cherubini (University of Salento, Italy), Mihaela Prikop-Jeckstadt (TU Dresden) and Jasmin Raissy (University Paul Sabatier – Toulouse III)

2017/1

Foreword

Dear Reader,

In the previous issue we announced a new format for the newsletter, to go with the re-organization of the EWM website. Works for the new website are still in progress, but nevertheless we decided to publish a new issue with the usual PDF structure.

In this edition we interviewed **Carolina Araujo**, from IMPA, who is organizing the next ICM 2018 in Rio de Janeiro; **Elena Resmerita**, our current Deputy-Convenor, elected during the EWM General Assembly in Berlin in July, and **Elisabetta Strickland**, who recently authored a beautiful biography of Mary Somerville, which is also reviewed here.

Another highlight of this issue is **Marie-Françoise Roy's** article on the project *A Global Approach to the Gender Gap in Mathematical and Natural Sciences: How to Measure It, How to Reduce It*. She is a co-ordinator of this large international and multidisciplinary collaboration, which will take place in the triennium 2017-2019. We also have **Mihaela Pricop-Jeckstadt's** article on sexual harassment and the report by **Semra Pamuk** on the recent activities of the Association for Turkish Women in Mathematics.

One of the topics we would like to feature regularly are reports on the activities of EWM in individual countries: in this issue the board of EWM in Netherlands presents its many activities.

Another feature we would like to propose for the next editions is a section about *Women in #a mathematical area#*. We would like to offer surveys of the state-of-the-art (research trends, achievements and activities) in various areas, whose size is to be decided. Therefore we encourage readers to come forward with proposals.

Finally, a big 'thank you' to **Sara Munday** who, after seven years of editing the newsletter, decided to step down (hopefully still keeping an eye on us): thanks Sara, and a big *in bocca al lupo* for your life and career.

Anna Maria Cherubini

In this issue

- Interview with [Carolina Araujo](#)
- Interview with [Elena Resmerita](#)
- Interview with [Elisabetta Strickland](#)
- [Book Review: The Ascent of Mary Somerville in 19th Century Society](#)
- [Sexual harassment in the European Union: facts and numbers](#)
- [A Global Approach to the Gender Gap in Mathematical and Natural Sciences: How to Measure It, How to Reduce It?](#)
- [Country Report: EWM The Netherlands](#)
- [Recent activities of the Association for Turkish Women in Mathematics.](#)
- [Prizes, awards and appointments](#)
- [Upcoming events](#)
- [News](#)
- [Useful links and contacts](#)

INTERVIEW: Carolina Araujo



Carolina Araujo is full researcher at IMPA (Institute for Pure and Applied Mathematics), Rio de Janeiro, Brazil, and Simons Associate at ICTP. She is member of IMU's Committee for Women in Mathematics and organizer of the (WM)² - World Meeting for Women in Mathematics 2018. She is also an invited speaker at ICM 2018.

EWM: *How would you explain your research to a non-specialist?*

My area of research is complex algebraic geometry, with focus on birational geometry. Birational geometry aims to classify and describe the structure of algebraic varieties. Roughly speaking, every complex algebraic variety can be built up from varieties from three special classes, which can be thought of as the classes of varieties with positive, negative and zero curvature. Varieties in the "positive curvature" class are called Fano varieties. A great part of my work is devoted to studying these varieties.

EWM: *Which are your favourite results up to now?*

I very much like my series of works on Fano foliations in collaboration with Stéphane Druel. Important problems in complex algebraic geometry can be approached using holomorphic foliations. On the other hand, a new theory of birational geometry of holomorphic foliations has recently emerged. Together with Stéphane, we have developed the theory of Fano foliations, revealed some of their special properties, and classified some of them.

EWM: *Can you tell us something about your story? When did you decide to be a mathematician and why?*

I have loved mathematics since high school. But I was not aware of the researcher career in mathematics until my first year in university. When I entered university I thought of studying engineering or physics. In my first year of studies, I took classes in all science and technology departments to figure out what I wanted. When I took my first serious mathematics course, a course in analysis, it was very clear to me that this is what I wanted to do in my life.

EWM: *Where have you studied and where have you worked up to now?*

I took my degree in Brazil and did my PhD in Princeton with János Kollár. After my PhD I came back to Brazil and I was a postdoc at IMPA for two years. After that I got a tenure track position at IMPA and I have just been promoted to full researcher, which is the highest level at IMPA.

EWM: *Do you teach?*

At IMPA we have only a graduate program, during three terms. I teach two classes per year, so I have one term off teaching. In the summer term, in January and February, we also offer courses for undergraduates, which are in general introductory courses so they start to get familiar with some areas of research: for example, this year I did a course in projective geometry for them.

EWM: *Has anyone supported you in your choice and during your career? Or the opposite: any obstacles you remember?*

Both my parents are engineers, and for a moment they were happy that I would follow the same path. But they understood that mathematics was my passion and that I was very sure in my choice to be a scientist, a mathematician. They were always supportive and proud of my achievements.

EWM: *You are the only woman among the permanent staff at IMPA: any comments on that? Is the presence, in numbers and roles, of women in mathematics in Brazil much different with respect to other countries? Are there ongoing actions regarding women in maths? Which are the most urgent issues, in your opinion?*

Yes, at this moment I am the only woman among the permanent staff at IMPA. I consider this a shame for such a prestigious institution as IMPA. I hope it will change soon, we are suggesting to the directors of IMPA that they should make an effort to hire women and they agree.

In terms of numbers and roles, the situation of women in mathematics in Brazil may be similar to that of many other countries. It's difficult to have a clear picture because it is difficult to get data: we started to ask funding agencies to have statistics about the number of women working in research and getting these data is very difficult. And Brazil is a huge country with many regions, with different cultures and huge social differences.

However, the lack of organizations of women in mathematics has made the situation of Brazilian women especially difficult, notably in institutions where there are very few of us. The gender issue in Brazilian mathematics has remained overlooked and undiscussed until very recently. In the last few years, however, several independent initiatives have been taken to bring to debate the gender issue in Brazilian mathematics, as well as to gather in collectives and networks.

We are now organizing round tables about gender issues and we organize them in various cities in order to bring women together and discuss the issues they are facing, and to get a global picture of the situation in Brazil. There are the usual problems, such as gender bias or hostile environments, and some women are facing harassment issues but we believe that once we are organized we become stronger to fight them. This debate aims at gathering women together to start talking about these issues, because if you are by yourself it is more difficult to move away from problematic situations.

In the upcoming Brazilian Mathematics Colloquium (the most important mathematics meeting in Brazil, which happens every two years), we are organizing a round table and panel discussion about the challenges and perspectives of women in Brazilian mathematics. Similar initiatives have been happening in other countries in Latin America. With the support of the Committee for Women in Mathematics (CWM) of the IMU, women and collectives from the region have been exchanging ideas and experiences, and there is a hope to launch a Latin American organization for women in mathematics in the future.

EWM: *Which is the distribution of women among students in maths?*

At undergraduate level there are a reasonable number of women, but it is quite common to see no women at all in PhD classes. The number of women usually starts

decreasing when you move up in academic career, so already at master level there are fewer women.

EWM: *You are one of the organizers of ICM, and you are also organizing the World Meeting for Women in Mathematics as a satellite event: please tell us something about these events and their organization.*

It is a great challenge to organize these events, but it is also very rewarding. We are using the ICM 2018 in Rio to improve public awareness of mathematics in Brazil. The biennium 2017/2018 is now officially the Biennium of Mathematics in Brazil, with several initiatives aimed at the general public. We have recently had a Math Festival in Rio, with great success, especially among children. There were many activities, including the Imaginary exhibitions, and it was full of children, mostly seven or eight years old. It's interesting to see how much small children are interested in maths, they are curious, they ask questions and then something happens and the interest disappears. It is something for us to think about.

The World Meetings for Women in Mathematics, (WM)², will be a mix of scientific activities and important debate about the gender issue in mathematics, most especially in Latin America. It will be a great opportunity to consolidate the networks that have been forming in the region. We will have a round table with women mathematicians from various countries in Latin America: CWM/IMU has a program to support networking events for women and we had already a few meetings: in Mexico and Chile, for example, there are already collectives and organizations: (WM)² will be a very important meeting point to exchange experiences and start organizing women mathematicians in Brazil too.

EWM: *Have you participated to the organization of the Mathematical Olympiad in Brazil? Do you think this events help to encourage students towards mathematics?*

No, I have not been involved with the organization of the Mathematical Olympiad in Brazil. But I think it is a great program, which effectively encourages students towards mathematics.

EWM: *Which are your passions, apart from mathematics?*

I have a 14 month old son, which became my greatest passion. Motherhood changed many things in my life. I am leaving aside for a while my passion for hiking and adventure trips, while discovering new passions, such as singing.

INTERVIEW: Elena Resmerita



Elena Resmerita is an associate professor at the Alpen-Adria Universitaet Klagenfurt, Austria. She studied Mathematics in Iasi, Romania and obtained her PhD in 2003 from the University of Haifa, Israel. She has been a postdoc at the Radon Institute of the Austrian Academy of Sciences and at the J. Kepler University in Linz. She was a recipient of an Elise Richter award from FWF - the Austrian Science Fund and had longer research stays at IPAM (University of California at Los Angeles), IMPA (Rio de Janeiro), Fields Institute (Toronto).

She has been an editor of the EWM Newsletter during 2010-2013 and has been EWM Deputy-Convenor from 2016.

Her research interests are in Inverse Problems and Continuous Optimization.

EWM: *"Math is the only place where truth and beauty mean the same thing" said Danica McKellar in one of her books. What does mathematics mean to you and how did you decide to pursue a career in this area?*

Mathematics means to me first of all numbers, which fascinated me since early childhood. Then it means a very structured thinking, creativity, and last but not least, a way to connect to a cosmopolitan world with a common language. I feel myself 'at home' whenever I am around a university or a research institution. I was oscillating between studying medicine and languages, when I finally had to be honest with myself and had to admit that Math was the easiest topic for me in school, the one that kept me interested for hours. So I enrolled as a math student in the A.I. Cuza University of Iasi, Romania (my home town). At first, I decided to be a math teacher, since I liked to work with children (as a first-year student, I used to give private lessons to younger pupils). At that time, I was not aware that one can do something else with math than teaching in schools. In Romania it was (and still is) not easy to get a teacher job at a school in a big city - there is an annual selection exam and the competition is tough. After graduation, although I obtained a very good grade in the selection, I could only get a job as caretaker for children in an orphanage in the city. There was no math involved there, and after a month I started fearing that I would forget everything I had learned in the university. So I began to study for a Master and soon I was asked by my Bachelor thesis supervisor, professor Anca Precupanu, to hold classes of analysis at the university. She was the one who encouraged me to pursue an academic career.

EWM: *What is the topic of your research and which are the mathematical questions that interest you presently?*

Short answer: Various aspects of regularization of inverse problems and Continuous optimization. Longer story: My PhD thesis developed fixed point approaches to some classes of convex feasibility, optimization and equilibrium problems, as well as of some linear operator equations. My PhD supervisor, (the late) professor Dan Butnariu advised me to complement my knowledge during my postdoc years by learning something new. This is why I started to work in the group of an expert in inverse problems: Heinz Engl, at the RICAM institute in Linz, Austria. Such problems are usually ill-posed, that is, small oscillations in the data can lead to large perturbations when computing the solution. Numerical differentiation, image denoising and deblurring or parameter identification problems are just some examples in this sense. I have been mostly concerned with stabilization methods for such problems, i.e., methods which have to take care of delivering solutions which are as accurate and stable as possible. Most of my research addressed linear ill-posed problems in Banach spaces, with the aim of denoising images, recovering sparse solutions or nonnegative solutions (e.g., probability density functions as solutions of integral equations of the first kind). Right now I'm working on the nonnegative solutions topic, which is not as simple as it sounds and continues to challenge me.

EWM: *You had the opportunity to get acquainted with the academic world in different countries: Romania, Israel, Austria. Could you share with us some of your experience regarding the funding opportunities and support for women wishing to follow a career in mathematics in these countries?*

I left Romania quite early, so I am not up to date with the funding situation there. But only from looking at the websites of mathematics departments there, one can see a

lot of women mathematicians at all academic levels. Israeli universities offer scholarships for PhD and for senior fellows on a regular basis, many of them being based on funding from donations. The Austrian Science Foundation (FWF) can finance research projects for women at early postdoc stages, called Hertha Firnberg projects, and at late postdoc stages towards habilitation, called Elise Richter projects. I was granted an Elise Richter project about ten years ago. I can say that this prompted one of the most beautiful and productive times in my professional life.

EWM: *You have a nice family: three children, a husband and, probably, a dog. How hard was it to keep everything working and what can you say about the help you received from your personal and job environment?*

We are still discussing about the dog. It has not been easy to get here, especially when the children were babies, toddlers and one was not able to sleep enough. But the best things in life seem to come in a package with the most work, so that is fair enough. You know, it becomes a routine after a while: wake up early, try to get well organized during the day (who does what, when exactly) - this is the theory, of course. Now the children are not so small and can help at home. The main support has been my husband, a computer scientist who also works in academia and thus understands this way of life. It helps that we go back together a long time. As for the job environment, I am lucky to be part of an institute where people are very familiar with each other, regardless of their job descriptions. Everyone is willing to discuss any professional issue in detail, in order to help in finding a solution. I appreciate that we have fun together, hiking, running, or just sharing some cake at the institute.

EWM: *Young people striving for a career need guidance. Could you recommend our readers some mentoring programs in mathematics?*

As far as I know, many universities offer mentoring programs for their PhD students and postdoc researchers, also in collaboration with external partners - I can name here the one at my university, which is called "Young

Scientists Mentoring". One should take advantage of such opportunities, since it helps at least to obtain international feedback on the topics one is working on, and to get closer to the corresponding scientific community. One could benefit from more or less official mentoring also via senior researchers that one meets at scientific events and especially via the collaborators of the (former) PhD advisor. There are still other mentoring possibilities, like the one that EWM plans to offer starting with 2017. EWM will make this public soon, and we hope that colleagues interested to be mentored or to act as mentors will answer the call.

EWM: *How did you get involved in the activity of EWM and what do you think it has achieved in the last years by this organization?*

I searched the Internet for an association in Europe similar to the AWM in the USA, after incidentally attending at a conference in the USA an event organized by AWM, which I enjoyed very much. I was happy to find it. Moreover, I got immediately involved, as the EWM convenor at that time, Frances Kirwan was looking for newsletter editors. This organization has grown very diversely each year - it is enough to look at the webpage and at the newsletters to have a short overview of its activities.

In my opinion, EWM is actively pursuing its main aims, which are giving young women confidence to continue their Math studies as far as possible, and making women's achievements more noticeable in larger Math communities. We address the former by, e.g., organizing summer schools, presenting portraits of interesting female researchers in Math, and providing useful information on women in Math by countries. The latter is approached by, e.g. answering calls from special committees on prize or plenary speaker nominations. Lately, Carola Schönlieb and I, together with enthusiastic long-standing and newer EWM members, have been working also on the administrative part concerning membership and fee collecting. Currently, we are focusing on developing a mentoring system within EWM (an older idea in this context) and on attracting funds to support a number of conference travel grants for members at the beginning of their careers.

INTERVIEW: Elisabetta Strickland



Elisabetta STRICKLAND is full professor of Algebra at the Department of Mathematics of the University of Rome "Tor Vergata". She has been Vice-President of the National Institute of Advanced Mathematics (INdAM) from 2007 to 2015. Since 2014 she has been a member of the Women in Mathematics Committee (WIM) of the European Mathematical Society and since 2015 President of the Central Committee for the promotion of equal opportunities, workers' welfare and non discrimination (CUG) of the University of Rome "Tor Vergata". She is also co-founder of the Gender Interuniversity Observatory GIO over the state Universities in Rome. Since 2016 she is Ambassador for Italy in the Committee of Women in Mathematics (CWM) of the International Mathematical Union.

In 2013, the Capitoline Administration awarded her the Prize "Excellent Women in Rome".

EWM: *How would you explain your research to a non-specialist?*

I believe it would be enough to say that I have been exploring various algebraic properties of varieties associated to constructions in linear algebra, with a characteristic-free approach.

EWM: *Which are your favourite results up to now?*

The main results which I obtained I think were the characteristic-free study of Buchsbaum-Eisenbud varieties, that is varieties which parametrize complexes of free modules; the generalization to positive characteristic of the construction of an equivariant compactification of an adjoint algebraic group over an algebraically closed field together with the extension to this case of results concerning the cohomology of line bundles; in these last years I obtained an explicit description of the ring of conditions of an adjoint semisimple complex algebraic group, using its identification with the direct limit of the cohomology rings of its regular, i.e. smooth toroidal, equivariant compactifications.

EWM: *Can you tell us something of your story? When have you decided to be a mathematician and why?*

I had a very brilliant professor of mathematics in high school. He was so fascinating that more or less all of my classmates did mathematics or engineering at university. I felt that mathematics was a challenge that you dealt with your best inner qualities, you faced your true self.

In any case I really liked math, it was fun. So I thought that being a mathematician was going to be great fun and it actually was!

EWM: *Has anyone supported you in your choice and during your career? Any obstacles?*

I got my degree in mathematics discussing a thesis in algebra. But then I got interested also in geometry and I was assistant of Beniamino Segre, an algebraic geometer, who encouraged me and I had my first tenure position as an assistant to his chair. He more or less forced me to do so, I was planning to work at IBM and I had indeed almost signed for a job there, but Segre met me in the elevator of the Accademia dei Lincei in Rome and convinced me that I was making a big mistake. So I started my academic career.

I married Corrado De Concini, who is a brilliant mathematician, though we have different ways of thinking and approaching things. Nevertheless, we had in our lives many useful discussions in mathematics and worked together in various foreign institutions such as Harvard, the MIT, Brandeis and so on, for which I feel extremely grateful to him and to the mathematicians who invited us, such as David Buchsbaum, David Kazhdan, Victor Kac.

Regarding obstacles, I never met a serious one in proceeding in my career, even if I had to go through a series of battles to obtain a chair in algebra, but, working hard, I finally had the chair when I was 36, which for me was a good result.

Nevertheless, I met obstacles when in 2007, the European Year for Equal Opportunities I decided to try to enter in the governance of the Istituto Nazionale di Alta Matematica in

Italy. I was the first woman to do so and I experienced the thickness of the so called glass ceiling! But things worked and I spent there eight great years as Deputy President. It's nice to take care of a community.

EWM: *Your biography of Mary Somerville has been published a few months ago: can you tell us something of the genesis of the book? Why have you chosen Mary Somerville in particular?*

The main reason for my choice was that I've been studying in the last six years the lives of women mathematicians and I learned that Mary Somerville had an extraordinary mathematical talent which only came to light through fortuitous circumstances. She was barely taught to read and write as a child, all the science she learned and mastered was self-taught. But she became one of the most outstanding British women scientists and furthermore a popular writer, all this in a predominantly male domain and in the Victorian age.

EWM: *You have always been active in supporting women in mathematics: tell us something about your engagement in this area. What are the most urgent issues in your opinion, and how would you tackle them?*

It's true that I tried during my career to take special care of women; I had brilliant female students and Ph.D. students. But my involvement became professional in 2004, when my University "Tor Vergata" in Rome formed an Equal Opportunities Committee and I became Delegate of the Rector for Equal Opportunities. So I had the chance to realize interesting projects to promote women in sciences in general; for instance with some women mathematicians colleagues of mine we even organized in Rome a big Conference for Women in Science in 2005, which had Rita Levi Montalcini as sponsor; two hundred female students attended, we used our experience in organizing a Day for Women in Mathematics in 1999 at the Accademia Nazionale dei Lincei in Rome, an incredible result if one thinks that only 4% of the around 500 members of the Academy are women, so they are obviously not welcome there!

Currently I am one of the members of the Women in Mathematics Committee of the European Mathematical Society, where we take care of gender issues in the European community and I was also nominated Ambassador for Italy at the Committee of Women in Mathematics of the International Mathematical Union, chaired by Marie-Francoise Roy.

As far as urgent issues are concerned, the number of women in mathematics in my country is still too low. Only around 16 % the full professors in the universities are women. But what really worries me is the digital

transformation of the country: by 2020 an enormous number of jobs will be available in the STEM area (Sciences, Technology, Engineering and Mathematics) and women are still prevented by stereotypes to enter these fields. I was invited to a very interesting meeting at the end of April in Milan, entitled "STEM in the City". The Mayor, Giuseppe Sala, and his staff, gathered together a number of women from all over the world to act as role models and to encourage young women to study and work in STEM. I saw outstanding ladies, all with a background in STEM, who reached very high positions and told their stories in order to prove that women are suited for these jobs. I felt really honoured for having been chosen as a woman in mathematics, as I love to explain what the advantages in choosing this type of career are. This is also an answer to the question "How to tackle the problem of not enough women in this area": present positive models, show figures and statistics, describe the possibilities: of course, as usual, numbers talk!

EWM: *Which are your passions, apart from mathematics?*

Writing. I've always been a great reader, during my daily one hour trip to my university by subway I devour books. And writing them is great, one of the major joys I experienced in my life! In 2011 I wrote a book on the women scientists during the 150 years of a united Italy. To my great surprise, it had a great success, because no one knew anything about these ladies, the majority of them had been completely forgotten.

EWM: *Which is a project you are working on? Have you any other dreams?*

Right now, besides trying to go ahead with the rings of conditions, I am studying the work and life of Emmy Noether, the woman mathematician who founded modern algebra, developing several ground-breaking mathematical concepts over the course of her career. I have spent hours surfing in her world, which means Nazi Germany and then the US in a female college, Bryn Mawr, in Pennsylvania. When she died, in 1935, after unsuccessful surgery, Einstein called her "the most significant genius thus far produced since the higher education of women began". Not bad, isn't it? I hope to be able to write a good biography of her as I did with Mary Somerville, because I've been working in algebra all of my life, and she started with invariant theory under the guidance of Paul Gordan and then Felix Klein and David Hilbert, so her theorems are so familiar to me, it's nice to understand her work!

And I have also a personal dream: to see my son, who works in the STEM area as software engineer at Amazon in Ireland (an example of brain drain for my country, unfortunately) having a serene future.

Book Review: The Ascent of Mary Somerville in 19th Century Society

Living in a society that naturally offers girls and women the chance to education, it is an astonishing experience to go back in time and to undergo a world where study and research for these were forbidden by law. The book "The Ascent of Mary Somerville in 19th Century Society" brings us back in this past and, at the same time, presents the elegant fight of one great dame for equal rights and opportunities for women. Her fight was not political, in the sense that she did not try to influence public opinion by speeches, statements or open actions like the suffragettes did, but, by winning the respect of the scientific world, she changed the views of the society regarding the capacity of women to understand and to communicate science. By giving this example of scientific competence, she backed the struggle towards education opportunities for women that lead to the schools for girls. The Somerville College in Oxford, named in her honour in 1879, produced famous graduates like Vera Brittain, Dorothy Sayers, Dorothy Hodgkin, Indira Gandhi and Margaret Thatcher who changed history.

The book by Elisabetta Strickland is not the first one about Mary Somerville, but it has two advantages: it is written by a woman mathematician from Italy. This means that the author and her subject are united through time by two great loves: love for mathematics and love for Italy. This double affinity leads to a charming book about the life of a woman in the 19th century through European science and through European society. Both journeys were so extraordinary for that time, that they still captivate the imagination today. Starting from a staggering lack of education in the childhood, due to a careless mother, Mary Somerville succeeded to auto didactically understand, to complete and to contribute to the public dissemination of two fundamental books in science: Newton's 'Principia' and Laplace's 'Mécanique Céleste'. Her book on the subject, "On the Mechanism of the Heavens", was a great success and made her a shooting star in the cultivated society of the 19th century. She and Caroline Herschel became Honorary Fellows of the Royal Astronomical Society in 1835, the first women sharing this honour, and were awarded the "Victoria Medal" as well as other distinctions and recognitions from different colleges and academies all around the world. Her intellectual comprehension coupled with her literary and artistic talent were unique, and allowed her to win the respect and admiration of the greatest scientists of the time, such as her life-long friend Sir John Herschel and Laplace, Poisson, Arago, Humboldt, and Baron Plana.

Another three books followed: "Physical Geography", "On the Molecular and Microscopic Science" and "The Connexion of the Physical sciences". These give a comprehensive view of the scientific discoveries of her century. The last book was written at the impressive age of eighty-one, making her a pioneer not only in the fight for gender equality but also against age discrimination and prejudices. Her contribution to science and her role as a model for generations of women were also recognized recently as she was chosen to be the first non-royal woman to appear on a Scottish banknote.

The book presents both the scientific and the personal life of Mary Somerville, and gives a glimpse of the high society of the 19th century. Since the general opinion of the time was that women should be married, she did marry twice: first an unhappy, then a fortunate enterprise. Even if her second husband got sick, making it necessary for them to leave Great Britain and to lead a nomadic life on the continent, this had the happy consequence of a new love in the life of Mary Somerville, the love for Italy, its nature, its culture and its society. Italy became her home and even after the death of her husband she could not leave the country that opened new worlds of beauty and serenity to her.

She enjoyed the charming life of Rome, Florence, and Naples but she was, above all, deeply in love with the Venetian *joie-de-vivre*, as we can read in her letters to her son. Inspired by the rich Italian cultural life and the great landscapes, she dedicated herself to painting for a while.

What makes this book so special is that the life and destiny of a great woman is painted as the portrait of a Renaissance's Madonna, on the background of European scientific society on one side and of the battles for the unification of history on the other.

But I do not want to spoil you the pleasure of discovering the destiny of a great lady and a wonderful scientist in the historical turmoil of the 19th century: buy the book and spend some very charming hours in this world full of contradictions!

Sexual harassment in the European Union: facts and numbers

Women are from Venus, men are from Mars. Hence, it often comes to misunderstandings between them and the attraction might not be mutual, even if, in Germany, about 30 % of pairs meet for the first time at their working place (at least according to a survey between 9000 participants made by Elite-Partner, a dating website). When “any form of unwanted verbal, non-verbal or physical sexual conduct which occurs with the purpose or effect of violating the dignity of a person” (Council of the European Union, 2004) happens, we speak about sexual harassment. The Council Directive 2002/73/EC provides this broader definition of what is sexual harassment, but the studies regarding this global problem use different concepts, and this makes the comparison and the meta-analysis difficult. Four different types of sexual harassment are generally recognized: “verbal (remarks about figure/look, sexual jokes, verbal sexual advances), nonverbal (“staring and whistling”), physical (from unsolicited physical contact to assault/rape) and cyber harassment (receiving unwanted, offensive, sexually explicit emails or SMS messages; inappropriate, offensive advances on social networking websites or in internet chat rooms).” Moreover, cultural differences between countries can make the definition look vague also. This situation concerned the Council of European Union already in the 1980s, and different EU projects focus on a European approach regarding this problem, starting with the concept itself, providing empirical evidence about the dimension of the problem on a continental level, and presenting similarities and differences about the legislation and measures in EU countries.

The awareness of the European Commission about sexual harassment was reflected in the first report on it initiated by the Commission in 1987. The next report funded by the Commission contains an overview of all significant research projects conducted at the national level between 1987 and 1997 (74 surveys and qualitative studies). It took almost 20 years until a comprehensive study about gender-based violence in EU countries was conducted. ‘Violence against women: an EU-wide survey’ is the survey run between 2012 - 2013 in 28 EU countries and is based on a random sample of women aged 18 to 74 years in the general population in each EU Member State, with a minimum national sample size of 1500 women except Luxemburg, and with the total sample size of over 42 000 women.

Detailed information about the objectives, the methodology, and the conclusions of this study can be found on the webpage

<http://fra.europa.eu/en/publication/2014/violence-against-women-eu-wide-survey-main-results-report>

Sexual harassment is only a chapter in the history of sexual and psychological violence against women. According to the statistics presented in the report, 45% to 55% of women in the EU-28 have experienced sexual harassment since the age of 15, 13% to 21% of them in the 12 months before the survey interview alone, and in the last group 32% indicated that this happened in the employment context- having a colleague, a boss or a customer as a perpetrator. Moreover, the higher the occupational group to which the woman belongs, the largest is the probability of sexual harassment: 75% of women in the top management category and 74% of those in the professional occupational category have experienced it during their lifetime. 20% of the victims experienced feelings of vulnerability, 14% of anxiety, 13% of loss of self-confidence, but the majority of women (55%) did not suffer any long-term consequences. From this survey it can be concluded that only few women reported the incident in the most serious cases, but 52% of them preferred to solve the problem themselves. The final recommendations encourage the awareness and reporting of sexual harassment in the EU, and underline the vulnerability of professional women alongside other women. Eurofound’s European Agency for Safety and Health at Work (EWCS) and European Agency for Safety and Health at Work (EU-OSHA) conduct surveys including questions about sexual harassment regularly. This information should be more widely used to highlight the problem of, and the responses to, the sexual harassment in the EU and each Member State.

High-schools cannot claim to be places free of sexual violence, and this concerns both the employees and the students. The EU-project “Gender-based Violence, Stalking and Fear of Crime” was conducted between 2009-2011 and focused on studying the sexual violence against female students in five EU-member countries (Germany, Italy, Poland, Spain, UK) and the measures that can be taken to prevent it in the European Union. Female students are a high risk group for sexual harassment, similar with professional women. University services dealing with incidents of sexual violence at national partner universities are in the focus of the study also. In Germany, for example, the victims of sexual violence, including sexual harassment, can count on the support of the equal opportunities officer, counselling service, student residences manager, student support committee. On the other hand, in Italy there is, besides the equal opportunities officer, the psychological help student centre, the commission on violence against women and the guarantor. Each EU-member country has its own help organizations that show that the society and the universities are aware of the dimension of the problem, and are trying to find answers to it, but the heterogeneity of these structures makes the presentation very cumbersome.

As an answer to this situation, the project EGERA “intends to promote a full set of measures to achieve gender equality and fight gender-based stereotypes in research and the academia.” Besides the declared purposes of the project like “tackling the opacity of recruitment and appraisal procedures, gender bias in evaluation and practices which contribute to slow down women’s careers”, sexual harassment was also in its focus. The month of Gender Equality (1st-31st of March 2017) included activities organized under the hashtag #ScpoEGALITEFH like Animation on Fighting Sexism at Sciences Po (8 March) or conference on gender based violence (15 March). EGERA recommendations for preventing and fighting sexual harassment include establishing an institutional mechanism to fight this problem, and pro-active actions and measures to be taken (see <http://www.uab.cat/doc/recomanacions-egera>).

In conclusion, sexual harassment seems to be a global problem, and there is still a long way to go before the EU Member States will align their politics to establish standardized principles and measures regarding this problem. Fortunately, there is an increasing awareness about it, and researchers are working together with politics to improve the situation EU-wide.

Mihaela Pricop-Jeckstadt

A Global Approach to the Gender Gap in Mathematical and Natural Sciences: How to Measure It, How to Reduce It? An international and interdisciplinary project.

Introduction

In science, the meaning and measurement of the gender gap is not established on a global scale, hence the aims of the project is to gather data, develop solid evaluation tools, provide comprehensive analyses, and produce actions to reduce the gap, with focus on public engagement activities. Our innovative and sustainable methodology will assure maintenance of data and programs in years to come, allowing trend analyses and extensions to other disciplines. The project will create and disseminate material to encourage young women's interest in science, in particular in the developing world, through science education and outreach.

The project constitutes a large international and multidisciplinary collaboration. It is approved by the International Council of Scientific Unions (ICSU) for the period 2017-2019, led by the International Mathematical Union (IMU) and the International Union of Pure and Applied Chemistry (IUPAC) and coordinated by Marie-Francoise Roy, chair of the Committee for Women in Mathematics and Mei-Hung Chiu, bureau member of IUPAC. It has 8 other partners : 5 ICSU unions, (International Union of Pure and Applied Physics (IUPAP), International Astronomical Union (IAU), International Union of Biological Sciences (IUBS) , International Council for Industrial and Applied Mathematics (ICIAM) , International Union for History and Philosophy of Science and Technology (IUHPST)) and 3 international organizations, the United Nations Educational, Scientific and Cultural Organization (UNESCO) , Gender in Science, Innovation, Technology and Engineering (GenderInSite) and the Organization of Women in Science for the Developing World (OWSD).. Detailed information and updates about the development of the project can be found on the webpage

<https://icsugendergapinscience.org/>

Project plan

- **Objectives**

Mathematical and natural sciences have long traditions of women who have made significant contributions. However, female scientists in these fields remain few, especially in developing countries. Currently, our data on participation of women is local, out of date, and inconsistent across regions and fields. Therefore, the objectives of the project are to:

(1) Provide evidence via both a joint global survey and a study of publication patterns to provide reliable data on which to orient future actions. (2) Obtain contrasts and commonalities across regions and cultures, less and more highly developed countries, and across different disciplines. (3) Provide easy access to materials to encourage young women to work in our fields, including information about careers and salaries directed at parents, schools, and others who influence the careers of girls, in particular in the developing world. (4) Recommend practical policies and actions that will reduce the gender gap.

- **Project description**

The project consists of three tasks. Tasks 1 and 2 provide data on which to base conclusions, to direct actions to attract and retaining women in science, and to develop and evaluate practical recommendations. Task 3 collects information on effective practices.

Task 1: Joint global survey

In 2010, IUPAP and AIP¹ conducted the Global Survey of Physicists comparing experiences of men and women physicists around the world. The survey (14,932 respondents from 130 out of 195 countries) highlighted contrasts between women and men, and between less and more highly developed countries (see Fig. 1). This survey was valuable in understanding gender issues such as differential access to resources, opportunities for women

and women on a country-by-country basis², or cultural expectations concerning child care. It aided decisions on where interventions are best targeted.

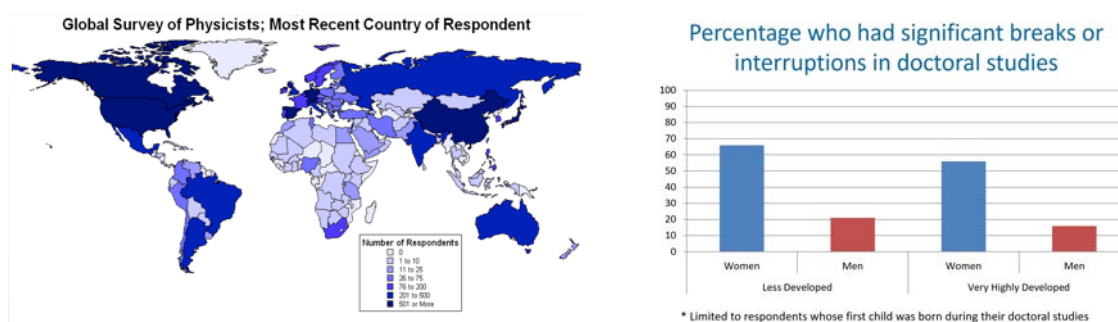


Figure 1: (left) Participation in the Global Survey of Physicists; (right) Sample result

In this project, we will improve and extend the survey to chemistry, astronomy, biology and mathematics. We will both treble the number of respondents and increase the number of countries. In addition to the original eight languages, the questionnaires will be translated into two additional languages. We will extend the survey beyond the academic world, towards scientists in industry and science teachers in secondary schools.

The survey will use special input from the three major regions of the ICSU Regional Offices. Inclusive gender concepts³ will be used. The understanding of gender issues in science communities will be acquired in collaboration with social scientists. Keeping the methodology as close as possible to the original survey will allow for detection of trends in physics, allowing to understand effects of recent political changes, the extent of limitations that have been placed on women's education⁴, and the evaluation of additional obstacles to the employment of women. For the other disciplines, the survey will provide the first step towards longitudinal analyses.

Task 2: Joint data-backed study on publication patterns

A solid publication record is a key factor in a successful academic career. In mathematics, a recent study⁵ on publication patterns based on comprehensive metadata sources showed a systemic gender imbalance in the publication distribution of mathematician. Using four decades of data, it was shown that women mathematicians tripled their number since 1970, but publish less than men at the beginning of their careers, and leave academia at a higher rate. High-ranked journals publish fewer articles by women, some showing less than 5% authorships by women with no change over time (see Fig. 2). Women publish fewer single-authored papers, although their co-author networks are similar in size to those of men.

Similar methodology will be used to study publication patterns in physics, chemistry, astronomy, if possible biology, and across countries and regions. This will allow us to understand common and discipline-specific issues that require interventions. We will develop some new items for the survey appropriate to different disciplines to determine specific areas of inequality at which to target recommendations.

A key objective is to create a sustainable and dynamic methodology to provide a continuous data processing flow, and hence allow for easy updates and longitudinal data analyses.

2 <https://www.aip.org/statistics/reports/there-land-equality-physicists>

3 See, e.g., <http://www.genderdiversity.org/resources/terminology/>

4 www.icsu.org/news-centre/news/icsu-expresses-concern-at-restrictions-on-higher-education-for-women-in-iran

5 H. Mihaljević-Brandt et al., "The Effect of Gender in the Publication Patterns in Mathematics", to appear

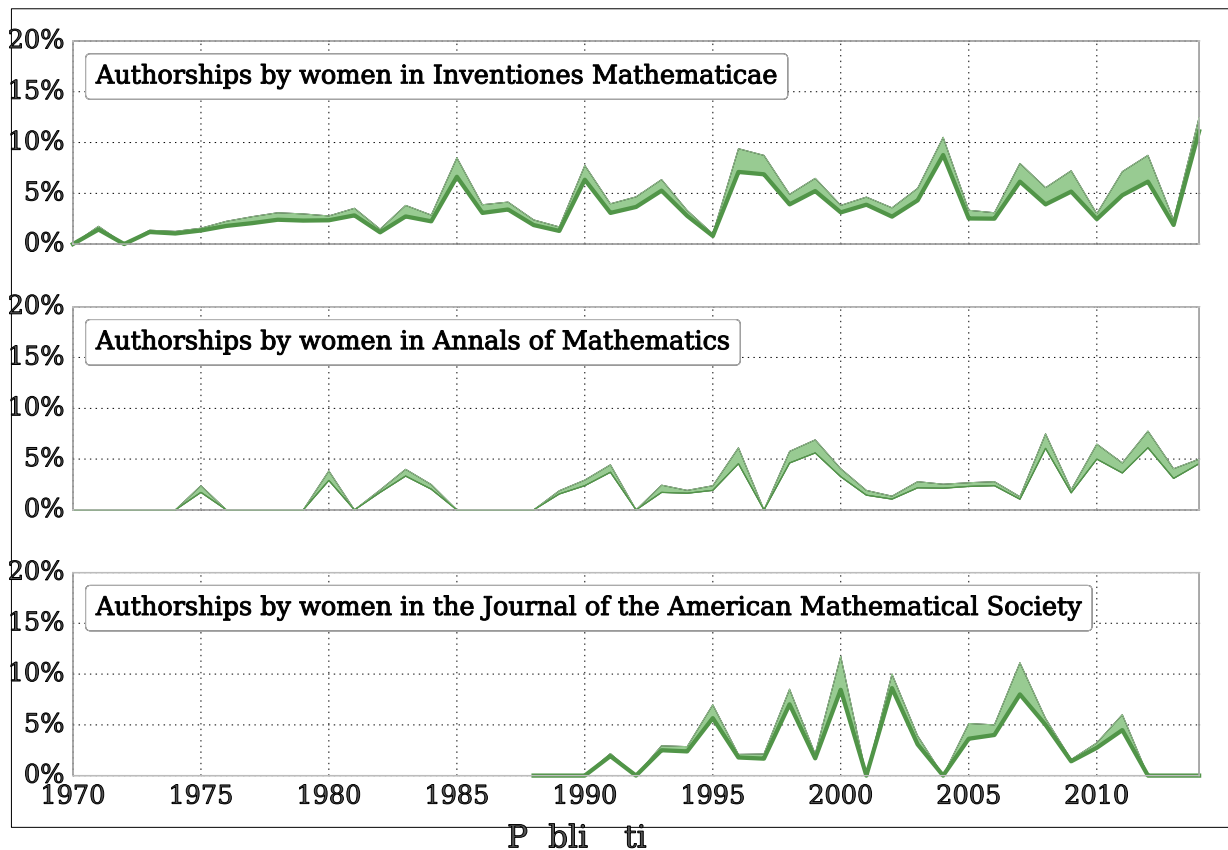


Figure 2: Authorships by women in two highly renowned mathematical journals

Task 3: Database of good practices for girls and young women, parents, and organizations

An online database will be created, hosted by IMU in the first instance, and disseminated through each participating organization. It will contain information on existing initiatives for which evidence of effectiveness exists. It will include searches and categorizations that will make the material easy to use. Some information on initiatives will be gathered as part of Tasks 1 and 2, but mainly through existing networks of each participating organization. The database will include a facility for adding new items, and guidance and support for the development and evaluation of new initiatives.

Task 3 includes the translation and distribution of materials, not only to young women, but also to parents and organizations involved in guiding young women into careers. This is especially important in developing countries, where information is needed about the stability of a career in science, and the availability of jobs. We understand that efficiently reaching parents is a real challenge.

Recognizing that perceptions of science and scientists arise during school, we will ensure that the database includes material targeting girls and young women of school age.

Work plan

Year 1: Project planning, preparation and conception

- (1.1) Initial workshop of partners 1-3 June in Paris.
- (1.2) Regional workshops in the three ICSU regions.
- (1.3) Task 1 – questionnaire preparation.
- (1.4) Task 2 – conception and preparation.

Year 2: Implementation of data collection and analysis



Figure 3: Members of the international team “Gender Gap in Science”

- (2.1) Task 1: Distribute and collect questionnaires through project partners.
- (2.2) Task 2: Data collection and analyses, with particular attention to results from developing countries.
- (2.3) Task 3: Setup database

Year 3: Final analyses, integration of results, recommendations and final conference

- (3.1) Task 1: Data cleaning, translations, quantitative and qualitative analyses.
- (3.2) Task 2: Finalize data analyses; establish continuous data import and analysis; create dynamic tools and visualizations.
- (3.3) Reports and dissemination of results.
- (3.4) International conference to evaluate each task, discuss new initiatives, and formulate recommendations.

Summary

The project will produce **sound data** to support the choices of interventions that ICSU and member unions can feasibly undertake. It will provide **evidence** for informed decisions, including trends – since the situation for women continues to change around the world, with some negative developments – and will provide **easy access to materials** proven to be useful in encouraging girls and young women to study and work in these fields. Regional information about careers, jobs and salaries will be provided.

The Joint global survey is planned to reach 45,000 respondents in more than 130 countries using at least 10 languages, while the Joint study on publication patterns will analyse comprehensive metadata sources corresponding to publications of more than 500,000 scientists since 1970. Contrasts and common ground across regions and cultures, less developed and highly developed countries, men and women, mathematical and natural sciences, will be highlighted.

Contact: marie-francoise.roy@univ-rennes1.fr

Marie-Françoise Roy

Country Report: EWM The Netherlands

EWM The Netherlands (EWM-NL) forms the Dutch branch of the European Women in Mathematics (EWM). Established in 2013, it is supported and financed by Platform Wiskunde Nederland (PWN), which is the Dutch organ that oversees all activities in mathematics in the Netherlands, and the Netherlands Organisation for Scientific Research (NWO).

EWM-NL is organized through an executive and an advisory board. The executive board consists of Francesca Arici (Media Coordinator, Radboud University Nijmegen), Anna Kruseman (Meetings Coordinator, Utrecht University), Brigit Sollie (Treasurer, VU Amsterdam), Maria Vlasiou (President, Eindhoven University of Technology), and Sanne Willems (Webmaster, Leiden University). They are supported in their activities by the advisory board comprising Mathisca de Gunst (VU Amsterdam) and Vivi Rottschäfer (Leiden University). Past members of the executive board include Stéphanie van der Pas (President), Sarah Gaaf (Coordinator) and Lisanne Rens (Coordinator), who after years of dedicated service, have passed the responsibility for the daily running of the organization to the new board in 2017.



EWM-NL has a mission that is closely aligned to that of EWM. The Dutch branch has formulated the following mission statements:

- to forge connections between female mathematicians in the Netherlands
- to support female mathematicians in their careers;
- to encourage women to study mathematics;
- to increase the visibility of female mathematicians;
- to provide information about women in mathematics;
- to cooperate with organisations with similar goals;
- to provide a meeting place for people supporting this mission.

To support this mission, EWM-NL organizes various activities and events. These actions aim to cover different aspects that are playing a role in a career in mathematics: career development, networking, visibility, mobility, equal opportunities, and dissemination of information. Below, a few of the ongoing activities are given.

In fall 2015, EWM-NL started a Mentor network, aimed at *female* mathematicians who need advice on things related to their mathematical career, such as balancing family and a career in science, networking with other scientists, or career development. This mentor network is loosely based on that of the Association for Women in Mathematics. EWM-NL has been so far supported by the Netherlands Organisation for Scientific Research (NWO), which is the main national funding organisation in The Netherlands. NWO oversaw the administration of the mentor network, coordinated registrations and provided secretarial support. Since 2017, the organisation of the mentor network has been taken over by the executive board of EWM-NL. What distinguishes the mentor network of EWM-NL from various other similar mentoring schemes that exist in Dutch universities is that this is a network linking mathematicians with mathematicians, and thus well attuned to the particular conditions and issues that mathematicians in The Netherlands face. At the moment, 10% of the members of EWM-NL are participating in the mentor program as mentees, but we hope to increase this number in the next months.

In addition to mentoring, several activities have been organised in the past years, with the broader focus being on *networking* and *career development*. Among these events, we highlight the third annual meeting of EWM-NL, "Math for all!" which took place on November 30th 2016. The topic was the gender imbalance at Dutch mathematics departments. Several prominent Dutch mathematicians participated. Professor Frank den Hollander (Leiden University) discussed the current numbers of female mathematicians and the solutions proposed in the Deltaplan. The Deltaplan is an initiative of the Minister of Education, Culture, and Science, Ms Jet Bussenmaker. The plan describes concrete actions with respect to education, research, teachers' training, society and innovation in mathematics, where one of the action points (Actie 9) is the increase of the number of female mathematicians at Dutch universities. In the "Math for all!" meeting, the research on implicit biases was reviewed by Naomi Ellemers (Utrecht), and the EWM-NL mentor network was promoted by Lisanne Rens (CWI). Corina Brussaard (UvA/NIOZ)

offered her personal view and advice on gender equality. The final speaker was Tomas Brage (Lund), who shared his perspective on gender balance and suggested many practical options for improvement. EWM-NL organizes various focused workshops on themes related to career development.

Increasing visibility of female mathematicians is one of our top priorities. To achieve this, EWM-NL was present at the inauguration of the photographic exhibition Women in Maths at Utrecht on March 23 (Emmy Noether's birthday) and had a stand at the Dutch Mathematical Congress. EWM-NL is working on making the exhibition travel through mathematics departments in the Netherlands, and plans to organise several events for these occasions. Other planned activities with respect to visibility include highlighting the work of a female Dutch mathematician in the national mathematics journals, and naturally through our own network, social media, and resources.

However, visibility itself is not enough, and EWM-NL is well aware of the struggles that female mathematicians face during their career. For this reason, with the support of PWN, we have established the EWM-NL *career support grants*. The grants form a pilot program, which will continue only if sufficient interest exists. For 2017, the board has voted to establish three small grants of up to 500€, available to support the career development of its members. Should funds permit, more grants may be made available. The purpose of the grants is to facilitate the participation of grantees to events significant to their career by covering expenses not otherwise covered by existing means. Examples of costs that can be covered by the grants are expenses for accompanying children at events such as transportation or extra accommodation costs, expenses for additional care for children remaining behind, training fees, membership registrations, conference registrations etc.

Next to the ongoing activities, EWM-NL has formed some (tentative) plans for the future. We aim to catalogue the most pressing issues for female mathematicians in The Netherlands and work together with PWN, NWO and the educational institutions to address some of those issues. We see room for improvement in various procedures and policies. We aim to propose amendments that will result to fairer (gender-blind) policies and we expect that the result will be positive to all mathematicians in the Netherlands, irrespective of gender. However, first and foremost, we are an association of mathematicians, rather than a policy-making instrument. As such, the board of EWM-NL plans to go on a tour among all Dutch universities in spring 2018, with the goal of better connecting to our members.

The EWM-NL board

Recent activities of the Association for Turkish Women in Mathematics

As a group of women mathematicians, we established the Association for Turkish Women in Mathematics in June, 2012. Our aim is to support women in mathematics, in social and scientific areas. We will try to create opportunities for female mathematicians to facilitate the advancement of their careers by cooperating with similar associations like EWM.

In order to achieve our goal an association, we try to bring women mathematicians and graduate students together to share their research, experience and ideas by organizing Women and Science events, Workshops of Association for Turkish Women in Mathematics, Graduate Summer Schools, and Women and Maths events, every year. You may find detailed information about these activities in our web page. We aim to organize Women and Science events and Workshops in a different university in Turkey each year.

In this report I will try to give details of the two events we have organized recently:

We have first organized a one day event called Women and Mathematics: Algebras, on March 11, 2017 at Istanbul Centre for Mathematical Sciences (IMBM). This meeting focused on group algebras, commutative algebra and representation theory. There were four invited speakers; **Brita Nucinkis** from University of London, gave a talk on cohomological finiteness properties of groups; Fatma Altunbulak Aksu from Ankara, gave a talk entitled "Ghost number: A new invariant for modular group algebras"; Ipek Tuvay from Mimar Sinan University Istanbul, talked about Brauer indecomposability of Scott modules and Pinar Mete from Balikesir University gave a talk on algorithms in commutative algebra. Even though it was a one-day, narrowly-focused event, there were 25 participants from different parts of Turkey. We hope to organize these events every year on the weekend around March 8, each year with a different, specific area of study.

Our second event was the Fourth Workshop of Association for Turkish Women in Mathematics that was held between 28-29 April, 2017, in Ankara, hosted by the Middle East Technical University. The main themes of the fourth workshop were Algebra/Model Theory, Applied Mathematics/Financial Mathematics, and Algebraic Topology. There were three invited speakers: Ozlem Beyarslan from Bogazici University, Istanbul gave a talk about geometric representations of pseudo-finite fields; Yeliz Yolcu Okur from Institute of Applied Mathematics, METU, Ankara talked about recent developments in financial mathematics and Semra Pamuk from METU gave a survey talk about group actions on spheres and product of spheres. Besides these invited talks there were sessions for short talks, six of 30 minutes and thirteen of 10 minutes, and poster presentations given by people ranging from senior mathematicians to PhD students. At the opening, convenor Belgin Korkmaz gave a presentation about EWM and informed the participants about our cooperation with EWM. At the end of the workshop, we had a discussion session about the workshop and activities of our association and expectations of women mathematicians from us. There were 149 registered participants but 101 of them attended the workshop. The participants were from 42 different universities from every region of Turkey.

Semra Pamuk, Coordinator for Turkey

Prizes, awards and appointments

Mélisande Albert (INSA Toulouse) is one of the two winners of the Marie-Jeanne Laurent-Duhamel Prize of the Société française de statistique: https://www.sfds.asso.fr/fr/prix_et_bourses/544-le_prix_marie_jeanne_laurent_duhamel/

Mireille Bousquet-Mélou has been recently distinguished as "EMS distinguished speaker" for the Foundations in Mathematics FoCM 2017 conference that will be held in Barcelona from July 10th to 19th.

Clara Grima (Universidad de Sevilla) jointly with Enrique Fernández Borja and Alberto Márquez, have won the prize Bitácoras for their culturalpostcas "[3 chanchitos](#)". More information can be found [here](#).

Raphael Herbin was awarded one of the Medailles de l'Innovation: <https://lejournal.cnrs.fr/articles/medaille-de-linnovation-le-palmares-2017>

Rebecca Hoyle (University of Southampton) is the 2017 Mary Cartwright Lecturer of the London Mathematical Society.

Eva Miranda (Universitat Politècnica de Catalunya) is the first Spanish woman who has been awarded a research chair of Fondation des Sciences Mathématiques de Paris. More information at <https://www.sciencesmaths-paris.fr/en/the-fsmp-chairs-803.htm>. Eva has also been distinguished with an ICREA Academia. The ICREA Academia programme was launched in 2008 with the aim of contributing to the intensification of the research carried out by university professors who are in a fully active and expansive phase of their research careers. The winners of the ICREA Academia award, all of them professors at Catalonia's public universities, receive a substantial research grant for a period of five years. More information can be found at <http://bgsmath.cat/eva-miranda/> and <https://www.icrea.cat/en/icrea-academia-awardees>.

Marta Macho Stadler (Universidad del País Vasco), editor of the blog [Mujeres con Ciencia](#) and former member of the Committee "Mujeres y Matemáticas" won the Emakunde 2016 prize for her trajectory, which has been oriented to promote and spread mathematics and scientific knowledge among women. More information can be found [here](#).

Béatrice de Tilière, professor at the Université Paris-Est Créteil (France), specialised in probability, received the CNRS Bronze Medal 2017 for her contributions on Ising models and dimers. These models of statistical physics describe the behaviour of large numbers of atoms, which opens up the road for using probability calculus. The Bronze Medal rewards the first results of a researcher, encouraging her or him to continue her or his research in an already fruitful direction and his given to one or two young mathematicians a year. In the last fifteen years, only three women have gotten this award : in 2015, Fanny Kassel, CNRS researcher now at IHES, and in 2008, Virginie Bonaille-Noël, CNRS researcher now at ENS, and deputy scientific director at INSMI (CNRS Institute for Mathematics and Interactions).

Claire Voisin, Professor at Collège de France, has received the Shaw prize in Mathematics together with Janos Kolla. See <http://www.shawprize.org/en/shaw.php?tmp=5&twoid=79&threeid=264&fourid=501>.

Upcoming events

The next EWM General Meeting in Graz, Austria, which will take place September 3-7, 2018.

The EMS speaker will be Gigliola Staffilani (MIT), while the following plenary speakers have confirmed their participation:

Shiri Artstein-Avidan (Israel)

Ilse Fischer (Austria)

Alice Guionnet (France)

Frances Kirwan (UK)

Maryna Viazovska (Switzerland and Ukraine)

Moreover, we are very happy that Naomi Ellemers from the University of Utrecht has agreed to speak on “unconscious bias and modern forms of discrimination” (see her website <https://www.uu.nl/staff/NEllemers/0>).

Several special sessions will be organized as well. Proposals for such sessions with title, abstract, list of speakers are welcome at ewm2018@gmail.com and should be **submitted by 31 August 2017**.

Please note that EWM cannot financially support the speakers in such sessions, except for situations when the speakers might qualify for a travel/accommodation grant - see below.

In case someone would like to contribute grant money to financing specialized sessions within this general meeting, please contact us at ewm2018@gmail.com.

There is already a meeting website at <https://sites.google.com/site/ewm2018/>, which will be updated in due course.

Registration will open in September 2017, with the possibility of expressing the interest in giving a talk or presenting a poster.

As usual, EWM will offer a limited number of travel and/or accommodation grants for female mathematicians from developing countries. Requests for support may be made when registering for the meeting.

Further announcements will be made as soon as more information is available.

We hope to see many of you next year in Graz!

The organizing committee

Karin Baur, Kathryn Hess, Elena Resmerita, Carola-Bibiane Schönlieb

The French association *femmes et mathématiques* (Women and mathematics) is organizing a conference for its 30th birthday in Paris on September 29-30 on “The teaching of mathematics: what is the situation of the differences between girls and boys today?”.

This is a collaboration with the Commission française pour l’enseignement des mathématiques (the French Commission for the Teaching of Mathematics), the network of the Instituts de recherche sur l’enseignement des mathématiques (IREM: Institute for Research on the Teaching of Mathematics) and the Institut Henri Poincaré (IHP). This conference aims at reviewing why girls succeed better at school, but seem to be less successful in normalized studies such as PISA or TIMSS, and why they still do not seem to be choosing the best orientations for their future jobs.

The exhibition “Women of mathematics throughout Europe: A gallery of portraits” (photographs by Noel Tovia Matoff and excerpts of interviews by Sylvie Paycha and Sara Azzali of thirteen women mathematicians throughout Europe) will be shown during the conference and the month of October at IHP.

Scientific committee: Michèle Artigue, Laurence Broze, Edwige Godlewki, Simon Modeste, Fabrice Vandebrouck.

Organizing committee: Annick Boisseau, Colette Guillopé, Monique Pontier, Véronique Slovacek-Chauveau, Brigitte Yvon-Deyme.

Call for proposals for a Mittag Leffler summer school

EWM and the EMS Women in Mathematics Committee are pleased to invite proposals for a one week summer school at the Institut Mittag Leffler in Stockholm in summer 2018.

The Institute will cover lodging and a meal allowance for everyone, and there is some travel money available. The school should be on a focussed topic of current importance and open to PhD students and post-docs of both sexes.

A special feature of the summer school is that there will be a much larger than usual involvement by women. We expect that most or all of the members of the organising committee, at least half the participants, and if possible the lecturers, should be female.

Proposals, which should be framed according to the guidelines, should be sent electronically as a pdf file to secretary@mittag-leffler.se with a copy to tillmann@maths.ox.ac.uk by 30 July 2017.

Guidelines can be found here

<http://www.europeanwomeninmaths.org/resources/news/call-proposals-summer-school-institut-mittag-leffler-in-2018>

and here

<https://blog.wias-berlin.de/imu-wim-news/2017/06/05/call-for-mittag-leffler-summer-school/>

Forum for young mathematicians, November 24-25, 2016, Strasbourg

The forum has been organised for 20 years by the association *femmes et mathématiques*. The Strasbourg forum was organised by Florence Lecomte et Christine Vespa and the subject was Geometry and Analysis. Twelve young mathematicians, eight women and four men, gave talks about their research. Talks were also given by more senior researchers, Nalini Anantharaman (analysis), Christine Huyghe (arithmetical geometry), and Sheila Sandon (symplectic geometry). There was also a workshop about stereotypes in science, another one about how to find a job in academia with a doctorate in mathematics, and a forum-theater about mathematics and stereotypes.

The next forum will be in Nancy, in fall 2017, on the theme « Mathematics and Interactions ».

In February 2nd 2017, during the celebration of the Spanish Royal Mathematical Society (RSME) Conference, the Women and Mathematics committee from RSME organized a round table entitled The infrarepresentation of women mathematicians in the academic world: causes, consequences, and solutions. The round table included a presentation by Marta Casanellas, president of the committee, and counted with the participation of Carlos Beltrán (Universidad de Cantabria), Clara Grima (Universidad de Sevilla), Edith Padrón (Universidad de La Laguna) and Mercedes Siles (Universidad de Málaga). About 60 people participated in the audience and a fruitful debate was generated afterwards. The reader can find the presentation and more information here: <http://mym.rsme.es/>

The Spanish Women in Mathematics committee, in commemoration of the 11 of February, International Day of Women and Girls in Science, launched the YouTube campaign **Las matemáticas somos nosotras**. This campaign can be followed at <https://goo.gl/N3KogO>

Updates on the exposition organized by Sylvie Paycha **Women of mathematics throughout Europe: A gallery of portraits** can be found at <http://womeninmath.net/project/>. The list of locations and dates is available at <http://womeninmath.net/all-locations/>

USEFUL LINKS AND CONTACTS

EWM website:	http://www.europeanwomeninmaths.org/	
EWM convenor:	Carola-Bibiane Schönlieb cbs31(at)cam.ac.uk	
EWM deputy convenor:	Elena Resmerita	elena.resmerita(at)aau.at
EWM email list:	Katrin Leschke	k.leschke(at)le.ac.uk

Other organisations with similar aims to the EWM:

The European Mathematical Society (EMS): <http://www.euro-math-soc.eu/>

EMS Women in Mathematics Committee: <http://www.euro-math-soc.eu/comm-women.html>

Committee for Women in Mathematics: <http://www.mathunion.org/cwm>

France: Femmes et mathématiques: <http://www.femmes-et-maths.fr/>

UK: LMS Women in Mathematics Committee: http://www.lms.ac.uk/activities/women_maths_com/

Job announcements:

<http://www.math-jobs.com>

<http://www.jobs.ac.uk/>

<http://www.euro-math-soc.eu/jobs.html>

Membership: The membership fee can be paid by credit card or Paypal via the EWM website, or by direct transfer to the EWM bank account. For more details, see

<http://europeanwomeninmaths.org/about-us/membership>