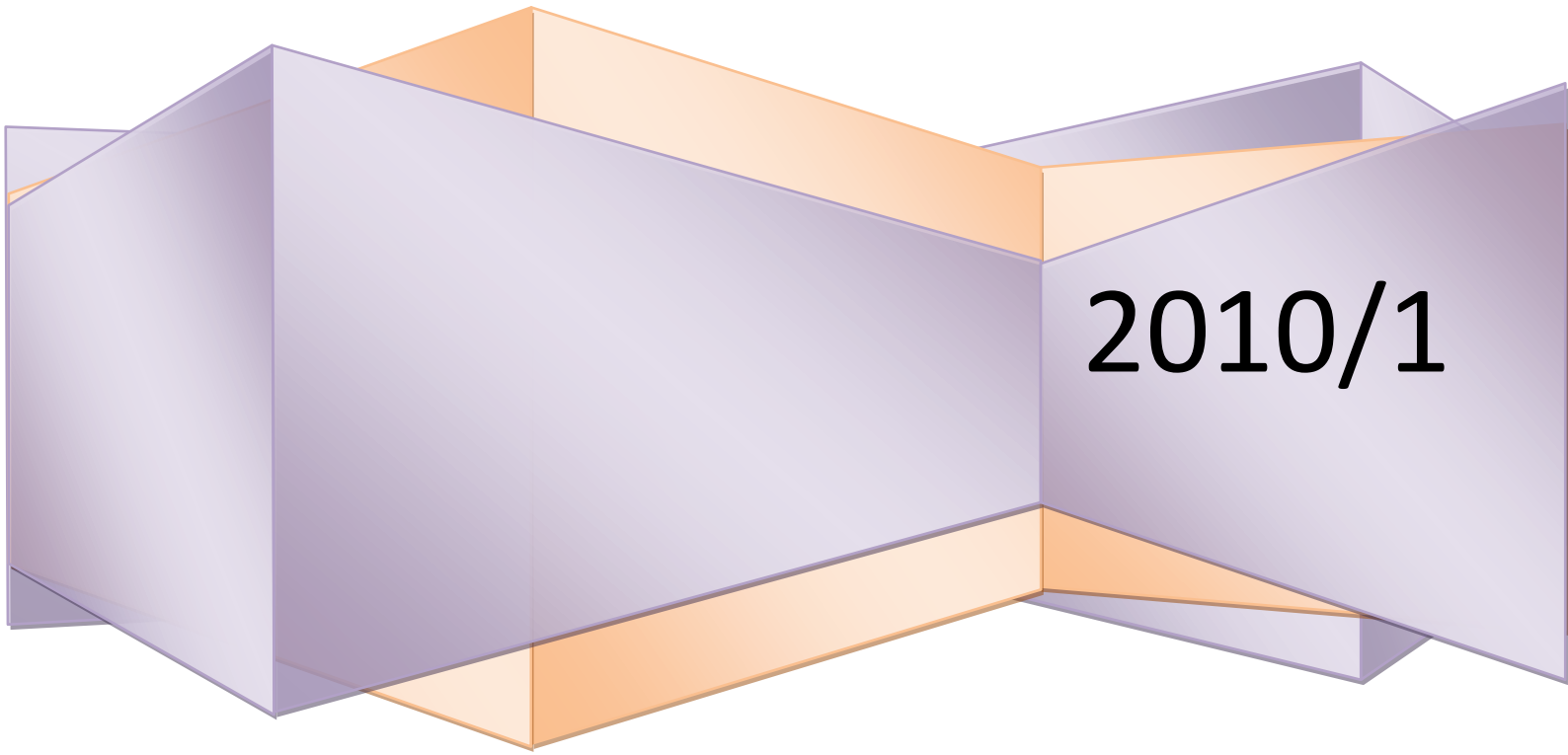
EUROPEAN WOMEN IN MATHEMATICS

Newsletter 16

Edited by Sara Munday and Elena Resmerita



Letter from the New Convenor

Marie-Françoise Roy

Dear EWM members,

I would like to start by saying how moved I was to be asked to be involved again with EWM activities, when Frances Kirwan wrote to me last summer, inviting me to consider becoming the next EWM convenor. I was among the founding members of EWM in 1986 in Paris, a few weeks after being in Berkeley where AWM organized a panel session I participated in as the French representative, at the invitation of Lenore Blum. The French association femmes & maths was also created in the same period, and I was its first president. Since then I have participated in several EWM general meetings: Paris, Marseille, Warsaw, Madrid, Loccum, Malta. The talk I gave in Loccum in the session on Hilbert problems was closely related to the paper I wrote in the volume Mathematics unlimited, 2001 and Beyond « Three problems in real algebraic geometry and their descendants ».

Mathematically speaking, I am a specialist in real algebraic geometry, and most recently, its algorithmic part. Algorithms in real algebraic geometry form a fascinating topic related to algebra, geometry, topology, logic, theoretical and practical commuter science, and a variety of applications. How can we decide efficiently whether two points belong to the same connected component of a set defined by a boolean combination of polynomial inequalities? This question is closely related to the «Piano mover's problem» in robotics! Most of my papers are coauthored, and I enjoy collaborative work, as well as acting as advisor for research students. I have been involved in writing two books: one, "Real algebraic geometry", with Jacek Bochnak and my husband Michel Coste, and a more recent one "Algorithms in real algebraic geometry" with my friends Saugata Basu and Richard Pollack. I am part of a collaborative project « sources of real algebraic geometry » with specialists of history, and mathematics. My main current research project, joint with Henri Lombardi, is the complexity of Hilbert's 17th problem: if a polynomial is positive, how can we express it efficiently as a sum of squares of rational functions? The initial beautiful proof by Artin was not effective at all and 85 years later we still do not know much about constructing sums of squares efficiently.

I have a deep involvement in sub-Saharan Africa: I lived in Niamey (Niger) with my husband and my two children from 1981 to 1983 and since then I have been committed to helping the development of this beautiful country and disseminating knowledge about its culture and history, particularly of women, in the area. I am a founding member of the French-Nigerian NGO Tarbiyya Tatali (see www.tarbiyya-tatali.org) and a coauthor of a book «Lougou et Saraouniya » devoted to the village of Lougou, cradle of the region of Arewa in Niger and residence of the queen and priestess Saraouniya . So, for me, Africa and feminist activities are not separated. Africa and mathematics are not separated either. I was teaching mathematics at the university in Niamey and had several research students there. I organized a CIMPA/ICPAM school in Niamey, as well as a research school in ICTP, during which the RAGAAD/ANGAAD network was launched. I am currently CIMPA/ICPAM regional scientific person responsible for sub-Saharian Africa. This is the reason that I was unable to attend the last EWM meeting in Novi Sad: I had to go to Yaounde (Cameroun) to a ICPAM/CIMPA school!

I am very happy with all EWM's current initiatives, particularly the joint EMS/EWM scientific committee and the close links with the EMS committee for women in mathematics. I know the EMS organization rather well, since I was SMF president from 2004 to 2007, a period when I was also SMF representative at various EMS meetings.

Besides the important project of an EWM foundation under the auspices of EMS, I would also like to encourage work on - updating the statistics on the situation of women in various European countries ; Eva Bayer had done a great job for the first European conference about 20 years ago and there are also statistics dating from 10 years ago on the EWM website ... The diversity of the situation of women in mathematics in different European countries provides us a wonderful argument to fight the idea that the low proportion of women in mathematics is due to natural causes !

-making connections with women from other continents, particularly in developing countries, and more particularly Africa; if the meeting we plan this year in Hyderabad works fine, it could be a start.

Improving the website is also a priority I mentioned when I was candidate for EWM convenor last summer: there is a lot of information already contained in the newsletters, and in the site in general, and it could be made much more visible. Things are moving fast there: we are lucky that Olga Lukina is very active at redesigning the EWM site and improvements will appear soon!

I shall represent EWM at the discussion «Women mathematicians around the world» at the two day meeting ICWM2010, immediately before ICM in Hyderabad. I am also a member of the organizing committee of the next general EWM meeting in 2011, to be hosted in CRM Barcelona from 5 to 9 September.

EWM is obviously a very lively and active organization and it is a pleasure to be part of its many initiatives and warm atmosphere.

With best wishes to everyone,

Marie-Françoise Roy

http://perso.univ-rennes1.fr/marie-francoise.roy/
EWM Convenor

INTERVIEW

Professor Rees was born July 1953 in Cambridge (U.K.). She was brought up in Exeter in a mathematical family, the oldest of four girls, another of whom (Sarah) is now a mathematician working at Newcastle University.

Her first degree was a BA in Mathematics (Class 1) at St Hugh's College Oxford in 1974, where she started the D.Phil. programme at Oxford, specialising in Functional Analysis. There, she completed two years, of which the first year was the M.Sc., before transferring to the Ph.D. at the University of Warwick, to work in Topological Dynamics with Prof. Bill Parry. Her Ph.D. was awarded in 1978.

After the Ph D came three years of post-docs, the first largely at IAS Princeton, but spending the summer at UC Berkeley, the second at St Hilda's College Oxford on a Junior Research Fellowship, the third at I.H.E.S., near Paris.

Then, she went to University of Minnesota, Minneapolis, as an assistant professor, arriving at the start of 1982. Worked there for three years and was granted tenure after two years, but left in 1984 to work at the University of Liverpool, where she remains to this day.

Professor Rees research has all been in dynamical systems, concentrated on complex dynamics since the early 1980's, when there was an upsurge in interest which has continued since that time. She also has a strong interest in, and has worked in, the closely related area of hyperbolic geometry. Her work has been recognised through the following awards: Junior Whitehead (LMS) prize 1986, sectional speaker at the ICM 1990, elected to the Royal Society in 2002.

Mary Rees

E-mail: maryrees(at)liverpool.ac.uk

EWM: How did you come to be interested in Mathematics?

MR: To an outsider it is obvious: I come from a mathematical background. Both my parents taught mathematics at university. It was not so obvious to me, however, when I was growing up, the oldest of four girls, three of whom have degrees in mathematics, and two of whom are now professors of mathematics. My arithmetic is fast but not always accurate. „Sums" was definitely not my favourite subject at primary school, nor was I initially very keen on maths at secondary school. I had good teachers, though. The one who really fostered my interest in mathematics had a clear policy of setting the minimum of homework in order to get the point across. I really appreciated that because it meant I had the time to check my arithmetic and did not feel under pressure. I like to think that has influenced my teaching methods ever since but probably my students would disagree. When I was about 14 I realised that I liked the subject. This was a problem because I hated science (which was not well taught, apart from biology). I thought I would need to take more science at O-levels (which preceded GCSE's) if I wanted to do mathematics at A-level. My mother told me that this was not necessary and that I could continue in the language stream, as I wanted. So I did, and then did English A-level along with two maths A-levels. Once I got to university I concentrated on doing Mathematics. There were uncertainties on the way to doing research, but not because I didn't want to do it, more about the fierce competition. Anyone who manages to land an academic job feels lucky for ever after.

EWM: What is (approximately) the female/male ratio among the researchers that you encounter in your everyday activity?

MR: This question could be interpreted in several ways. There is now one other woman in Pure Mathematics in my department, out of 12 permanent staff in this area, and we have talked about research in general terms a bit, but most of our contact is on routine teaching matters. For the twenty five years that I have been teaching at Liverpool, there have always been between one and four other women on the permanent staff. We have a handful of women graduate students, in the department, currently one in Pure Mathematics, although another has just completed. I am not sure if „everyday activity" should include email because I do not meet researchers in dynamics on a daily basis. I think the ratio of women in complex dynamics, internationally, is much higher than the one in ten I encounter in my work „every day" . I have always found that I overestimate the number of women around. If I have a class test I count the number of women in the room (and also the number of left-handers) and always find it is less than I thought.

EWM: Did you know about the EWM before this interview? If yes, how did you find out about it?

MR: I have known about EWM for a long time. I THINK I have paid my latest dues but I remember it was quite tricky last time so I could be overdue with that. It is a while since I have attended any EWM conferences I am afraid, or even the local meetings.

EWM: In your opinion, how can a women's organization such as EWM contribute better to the mathematical community at large?

MR: I do think that the meetings where researchers, especially younger women, talk about their work and their interests, are extremely valuable. I would certainly attend more of these if I had more time. Fostering the research of the young is the most important thing, especially for those of us who are beyond that stage. This is not necessarily a gender issue, but research is so tough, especially in the early years, that the more support can be given, the better.

INTERVIEW

Eugenia Rosu was born in December 1988 and grew up in Iasi, Romania, where she graduated from the "Costache Negruzzi" National College (High-School) in 2008. She has won the Gold medal at the Balkan Mathematical Olympiad in 2008, being the absolute winner of the contest. Moreover, she has won several 1st and 2nd-3rd prizes in various international and Romanian mathematical contests. Starting from 2008, she has been an undergraduate student at the Jacobs University in Bremen, Germany, which supports her studies by a Merit-based Scholarship. In addition to her regular courses, she takes courses for graduate students, being involved also in teaching and internships outside Jacobs University.

Eugenia Rosu

*E-mail:*e.rosu(at)jacobs-university.de

EWM: How did you come to be interested in Mathematics?

ER: In high school I have participated at national mathematics competitions and, while spending more and more time on preparing for the olympiads, I was absorbed by the beauty of mathematics. I was not sure in my first semester of college that I wanted to pursue my passion to a full-time job, as it is said to be a great difference between olympiad problems and research. After the first few lectures of math courses I was sure that I could not find anything to interest me and challenge me as much as mathematics.

EWM: What is (approximately) the female/male ratio among the researchers that you encounter in your everyday activity?

ER: I think the male/female ratio among the researchers that I have met is around 80 to 20 percent.

EWM: Did you know about the EWM before this interview? If yes, how did you find out about it?

ER: I did not know about EWM before this interview.

EWM: In your opinion, how can a women's organization such as EWM contribute better to the mathematical community at large?

ER: EWM can have a strong psychological impact on women. To meet strong women, even only to read about successful women, is of great importance to us. There is still a subtle discrimination, even only at a subconscious level, between men and women in mathematics. We are more sensitive than men and sometimes we are overwhelmed. We need role models, inspiration. Also, it would be interesting to meet women mathematicians from different parts of Europe, that encounter the same problems as we do.

Another way in which EWM can help is by informing women about grants and career opportunities aimed for women. Also, I think it would be useful to provide internship opportunities for undergraduates or cooperation possibilities with other researchers, in order to encourage young women who are studying Mathematics. Moreover, it might be a good idea to offer annually prizes for excellence to the women researchers, in this way promoting great women mathematicians.

REPORT: The 14th General Meeting of EWM, 25-28 August 2009, Novi Sad, Serbia

More than 70 women from 25 countries participated in the conference

The 14th General Meeting of European Women in Mathematics, EWM 2009, took place during 25-28 August at the Faculty of Sciences at the University of Novi Sad, Serbia.

The talks of the invited speakers, addressed to a general audience, covered many fascinating topics ranging from image processing to mathematical biology to group theory. Each of the speakers gave a short account of her mathematical life story.

The invited speakers were:

Ingrid Daubechies (Princeton University, USA; 2009 EMS lecturer)
Nalini Anantharaman (Centre de Mathmatiques Laurent Schwartz, France)
Barbara Lee Keyfitz (University of Houston, USA)
Jelena Kovačević (Carnegie Mellon University, USA)
Cheryl Praeger (Univ. of Western Australia)
Marta Sanz-Solé(Barcelona University, Spain)
Tatiana Suslina (St. Petersburg State University, Russia)
Reidun Twarock (University of York, UK)
Brigitte Vallée (CNRS, France)

The 2009 European Mathematical Society Lecturer, Professor Ingrid Daubechies, gave three of her EMS lectures at the meeting. After describing how her interest in science and mathematics began as a child, she gave her first lecture about wavelets and painting analysis. The complicated theory of wavelets was illustrated visually by showing how to attempt to tell apart a fake copy from an original Van Gogh painting.

Beside the talks given by the invited speakers, the conference participants had the opportunity to attend the General Assembly of the EWM, an overview of the European Union's Marie Curie FP7 Programme presented by Dagmar Meyer, a panel discussion on how women's professional behaviour impacts their careers, and a varied array of short talk sessions and poster presentations. During the General Assembly Meeting a new Convenor and Standing Committee were elected for the next two years, and the future of EWM was discussed. The local organizers, aided by a dozen student volunteers, looked after the participants with great enthusiasm, both at the conference venue and at the attractive student residence where all the participants from outside Serbia stayed. They arranged a tour of the city of Novi Sad together with a reception at the local branch of the Serbian Academy of Science on the evening of August 25. Then during the afternoon and evening of August 26 the participants were taken on an excursion to the historic city of Sremski Karlovci and enjoyed dinner at a fish restaurant on the beautiful Danube shore. The highlight of the last full day was a surprise lunch featuring an art exhibition on the theme of women in mathematics by Vanja Barisic Jokovic, whose professional public relations agency handled all the publicity for the meeting (free of charge to EWM) and designed the striking conference logo. At this exhibition participants were able to admire the baby suits, decorated with the conference logo, which were presented the following day at the maternity hospital in Novi Sad to all the babies born during the week of the conference, in the presence of the EU Deputy Ambassador to Serbia who had provided financial support for the meeting ... and for the baby suits! The conference was covered widely by the Serbian television and press, and all the talks were filmed by a professional crew, with the goal of creating a conference DVD. This DVD will also include interviews with many of the participants, as a follow-up to the earlier EWM film “Women in Mathematics Across Cultures" (1994 by M. Näätänen).

by Laura Ciobanu and Camilla Hollanti

REPORT: The 3rd Nordic EWM Summer School, 22-27 June 2009, Turku, Finland

The summer school had around 90 participants

The first EWM Nordic summer school was held in Luleå, Sweden in 1996 and the second in Gothenburg, Sweden in 2003. At the end of the second summer school, the idea of holding a third meeting was raised. It was decided to hold the summer school at the University of Turku, in Finland, from 22-27 June 2009. The goal of the third summer school, just as in previous years, was to encourage the participation of European women in mathematics and to give an opportunity for the development of supportive social networks amongst women mathematicians.

In the EWM newsletter report following the second summer school (see http://www.math.helsinki.fi/EWM/news/news04.html), it was stated that 12 speakers were invited and 21 PhD students attended, all from either Denmark, Sweden or Norway. Also, all of the speakers and students were female. By contrast, this year there were 17 speakers and around 90 participants, from as far flung locations as Brazil, Argentina and Morocco and, of course, from all over Europe. It was decided to invite both male and female speakers and students, although in both cases there was a clear majority of women.

The scientific program was arranged in the same way as in prior years, namely there were three mini-courses and a number of special lectures. There was also a series of lectures on topics in Gender and Mathematics. The aim of the mini-courses was to give an introduction to different areas of mathematics, but move quickly onto areas of current research. The courses and special lectures were all given by mathematicians of international standing and the talks were consequently of an extremely high quality. As we will see below, the program was extremely broad, which was reflected in the wide variety of interests of the attending students. One of the most rewarding aspects of the summer school was the opportunity to learn something from outside your own area, both from the courses and from talking to the other participants.

The first mini-course was in the area of Number Theory, Algebra and Applications. The speakers were Eva Bayer-Fluckiger, who gave an introduction to algebraic number theory and coding, Sujatha Ramdorai and John Coates, who gave lectures on local and global class field theory, respectively. Both Prof. Ramdorai and Prof. Coates gave special lectures furthering the material covered in the mini-course at the end of the week. Within the subject area of the first mini-course, there was also a very interesting special lecture given by Kaisa Nyberg, from the Nokia Research Centre, on methods for symmetric key cryptography.

The second mini-course covered topics in Analysis. This is a very large area of mathematics, as evidenced by the variety of material presented here. The mini-course lectures were given by Maarit Järvenpää who taught the basics of fractal geometry, Lisa Lorentzen, who presented an introduction to continued fractions and Ritva Hurri-Syrjanen, who gave a tour of Sobolev spaces. Each one of these mathematicians also gave a special lecture, providing a more in-depth look at the topics introduced in the mini-course. Also, Sirkka-Liisa Eriksson gave a lecture on function theories in higher dimensions.

REPORT: The 3rd Nordic EWM Summer School

In the third mini-course, the audience was introduced to various aspects of Biomathematics. The lecturers on these topics were Patsy Haccou, who gave a taster of modeling of invasions and calculating establishment success chances, and David Sumpter, who introduced collective motion. Barbara Boldin gave a special lecture on the evolutionary dynamics of virulence and the final special lecture of the week was given by David Sumpter who went further into the mathematics of the movements of groups of animals. Luckily for the pure mathematicians in the crowd, these lectures were very understandable for nonexperts.

In addition to the scheduled talks by the professionals, there were also opportunities for students to present their work. There were three sessions of contributed talks, each talk lasting twenty minutes. All of the participants had obviously taken seriously the aim of communicating as clearly as possible and the talks were generally of a high standard. There was also a poster session, where students were given ten minutes to give a very brief summary of their work and answer a few questions. The posters were on display for the whole day, so everyone could look again at their leisure. Despite the difficulty inherent in explaining a new mathematical idea in such a short time, the poster session was a great success and an interesting addition to the program.

The last component of the program was the lectures on Gender and Mathematics. We were given insights into an area most of the audience had presumably not given so much thought to before. Andrea Blunck gave a presentation on the way that mathematics and gender is now being taught in some institutions in Germany, Colette Guillopé gave a report into the state of women in mathematics in France and Riitta Soro presented some fascinating research done on the attitudes and beliefs of teachers regarding girls, boys and gender in mathematics. Finally, Markku Hannula gave a talk on what teachers of mathematics should know about boys and girls. All of these talks generated some discussion, but it is fair to say that the most spirited discussion followed the talk of Markku Hannula. The arguments about whether or not it is right to teach in a gender-specific way and other such topics dominated the conversations at coffee breaks for at least the rest of that day!

It was decided by the organising committee to provide lecture notes in the form of a Proceedings, published by Turku Centre for Computer Science. This book contained articles by the visiting speakers and also by several of the student participants. The proceedings were edited by Anne-Maria Ernvall-Hytönen and Camilla Hollanti and each article was reviewed by a member of the scientific committee before publication. The proceedings were invaluable for the students attempting to keep up with all the scheduled talks.

Finally, the event would not have been possible without the generous assistance of the sponsors: European Mathematical Society, Google, University of Turku, Finnish Cultural Foundation, Otto A. Malm Foundation, Nokia, Oskar Öflund Foundation, Finnish Centre of Excellence in Analysis and Dynamics Research and Turku Centre for Computer Science (TUCS).

By Sara Munday

Social program and participants' overall impression about the summer school

Harmony - Happiness - Empowerment - Collaboration - Friendly Atmosphere

The 3rd Nordic EWM Summer School for PhD students in Mathematics was a synonym for such feelings as happiness and empowerment which are being felt by about 90 participants coming from 30 countries.

There was a consensus that this year the EWM summer school was a success in organizing both the scientific and social programs with great balance. The summer school did achieve, in participants' view, its main goal, which was to provide a stimulating intellectual environment for PhD students from different countries and different mathematical disciplines to learn new mathematics and meet new colleagues.

The scientific program was appreciated as being both specialized and diversified across different specializations. The key success factor for the scientific program was that every participant found at least one session, mini-course, special lecture or other contribution interesting and relevant to their field, although the participants came from various fields of research and studies of both pure and applied mathematics.

As for the social program, the get-together with sauna and sausage in the evening of the summer school's first day was particularly appreciated by almost all the participants as it was very effective in breaking the ice and provided a nice atmosphere for attending all the events of the summer school. It even encouraged the participants to further network, with group outings and group dinners later in the week. Watching the film "Women in Mathematics Across Cultures" was another interesting part of the social program. Although some participants found the film very depressing, the film stimulated indeed very fascinating discussions and helped thoughts in comparing women's issues raised in the last 10-15 years to the issues we might be facing today.

REPORT: The 3rd Nordic EWM Summer School

The excursion and the reception in the evening of June 25 were extremely successful and everybody had such a great time (walking in the garden, seeing nice villas and big cruise boats, dining at marvellous restaurant, etc.).

In general, participants' feedback highlighted the different impressions about various summer school aspects in an extremely positive way. Some of these impressions are listed as follows in participants' own words:

"It was, without any doubt, the best summer school I have ever attended. This kind of event should be held every year"

"I left the summer school with a great sense of optimism for the future"

" I felt empowered as a woman in Mathematics field"

"I found the atmosphere very nice and it was easy to get to know the other mathematicians"

"I think it was a very good experience - I learned a lot of new stuff, got lots of good ideas and met many interesting people"

"Wonderful experience: effective networking, enhanced knowledge and empowered mathematicians"

"I think overall it was a very nice and successful summer school"

"I liked that people were open to discussions and didn't hesitate to ask questions. The conference was actually quite unique in this sense"

"Talking with woman mathematicians has helped me feel more confident and makes me want to pursue mathematics despite all sort of problems"

"It was all very nice, too bad it all passed so quickly"

Moreover, when the summer school questionnaire was sent to the participants, a large number of respondents were complimentary about the organization and the venue (the lovely Turku). And there was a consensus on the need for such summer schools as this one for keeping women empowered in mathematics and keeping PhD students inspired and dedicated to pursue a career in Mathematics.

by Rania Azmi

The newsletter's new editors

Sara Munday

Sara Munday graduated from St. Andrews University in Scotland in 2004. After 2 years at the University of North Texas as a teaching fellow, she is currently back at St. Andrews in the final year of PhD studies, working on dynamical systems and number theory.

Elena Resmerita

Elena Resmerita graduated from the A.I. Cuza University, Romania and obtained her PhD from the University of Haifa, Israel in 2003 with a thesis on infinite dimensional optimization. She is a senior researcher at the Johannes Kepler University, Linz, Austria, where her main research topic is regularization of ill-posed inverse problems.

The newsletter will appear twice a year starting with 2010.The next issue is scheduled for September this year.

Please send your suggestions for the content of the newsletter to sam20(at)st-andrews.ac.uk *or e*lena.resmerita(at)jku.at.

UPCOMING EVENTS

Isaac Newton Institute for Mathematical Sciences

WOMEN IN MATHEMATICS MEETING

Women in Mathematics Two Day Meeting (to include the annual Women in Mathematics Day)

Thursday 15 & Friday 16 April 2010

The Women in Mathematics Day is an annual event organised by the London Mathematical Society and will take place on 15th April 2010 at the Isaac Newton Institute in Cambridge. Sessions at the day will include talks and posters by women mathematicians in a variety of appointments and at different career stages.

This year we have received funding from the UK Resource Centre for Women in SET to follow the Women in Mathematics Day with an additional day containing a number of practical sessions to help women get the most out of their careers in mathematics. Sessions will include advice on how to get funding for your first postdoc and beyond and discussion groups on topics such as combining family and career, working overseas and making the next step in your career. There will also be the opportunity to meet leading women mathematicians from a number of countries across Europe.

The event is open to all but would be of particular interest to PhD students and those at an early stage in their career. The first day would also be of interest to final-year undergraduates.

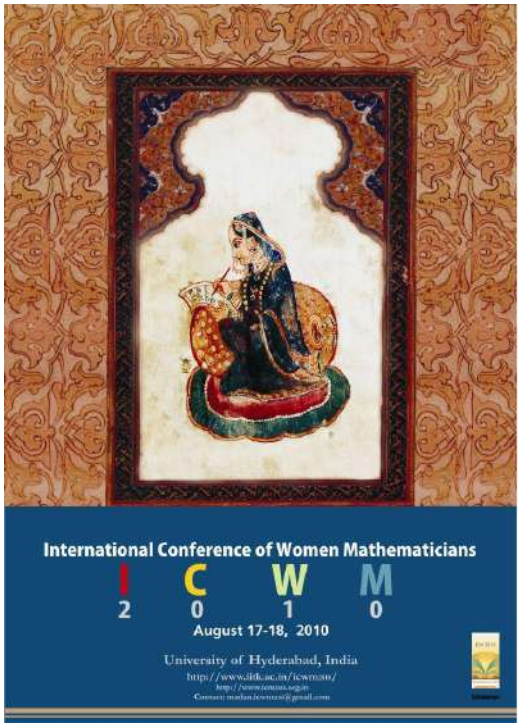
To encourage high quality posters, a £50 book token will be awarded for the poster that is judged to be the WiM Day Best Poster 2010.

To register and for more information, please visit the website:

http://www.newton.ac.uk/women/WIM/wimw01

SECOND ANNOUNCEMENT OF ICWM 2010

International Conference of Women Mathematicians, August 17-18, 2010, Hyderabad, India



ICWM 2010 will take place at the University of Hyderabad over the two days immediately before the International Congress in 2010. The meeting is aimed principally at women mathematicians attending the ICM (though men are also very welcome to attend), and in particular at young women mathematicians and women from Asia and from developing countries. The talks will be colloquium style lectures aimed at a general mathematical audience, and it is hoped that participants will be provided with an opportunity to meet other women mathematicians about to take part in the ICM and to find out about some of the areas of research to be covered at the ICM.

There will be nine lectures of 45 minutes each from the following speakers:

Julie Deserti (Paris, France)

Frances Kirwan (Oxford, UK)

Maryam Mirzakhani (Stanford, USA)

Neela Nataraj (IIT Bombay, India)

Raman Parimala (Atlanta, USA)

Mythily Ramaswamy (TIFR Bangalore, India)

Maria Saprykina (KTH Stockholm, Sweden)

Nathalie Wahl (Copenhagen, Denmark)

Di Yana (CAS Beijing, China)

In addition to the lectures there will be a discussion forum and a conference dinner on the evening of 17 August. Registration began on 1 January 2010. More information (on the venue, programme, accommodation etc) is available on the website listed above.

ICWM 2010 is being organised with the support of European Women in Mathematics (http://www.math.helsinki.fi/EWM/), the European Mathematical Society (http://www.euro-math-soc.eu/) and the Association for Women in Mathematics (http://www.awm-math.org/). Financial support is being provided by the National Board for Higher Mathematics (NBHM), India and by Schlumberger. There will be some funding available to support the travel and accommodation costs of women participants from Asian and developing countries, and women from these countries are encouraged to apply to the local organizing committee.

Local organising committee (set up by the ICM Executive Organizing Committee):

Shobha Madan (Indian Institute of Technology, Kanpur), chair

Mahuya Datta (Indian Statistical Institute, Kolkata)

S.G. Dani (Tata Institute of Fundamental Research, Mumbai)

Jaya N. Iyer (Institute of Mathematical Sciences, Chennai)

B. Sri Padmavathy (University of Hyderabad, Hyderabad)

Rahul Roy (Indian Statistical Institute, Delhi)

Geetha Venkataraman (St. Stephen's College, Delhi)

The scientific programme has been planned by the EWM/EMS Scientific Committee, co-opting two mathematicians from India.

Scientific committee:

Ulrike Tillmann (Oxford, UK), chair

Viviane Baladi (ENS, Paris, France)

Eva Bayer (Lausanne, Switzerland)

Christine Bernardi (Paris VI, France)

Christine Bessenrodt (Hannover, Germany)

Antonella Grassi (U Penn, USA)

Ursula Hamenstaedt (Bonn, Germany)

Dusa McDuff (Stony Brook, USA)

Ragni Piene (Oslo, Norway)

Mythily Ramaswamy (TIFR Bangalore, India)

Sujatha Ramadorai (TIFR Mumbai, India)

Vera Sos (Renyi Institute, Budapest, Hungary)

Nina Uraltseva (St Petersburg, Russia)

Michele Vergne (Ecole Polytechnique, Paris, France).

For more information contact the chair of the organising committee Shobha Madan (email address: madan@iitk.ac.in).

http://www.iitk.ac.in/icwm2010/

UPCOMING EVENTS

4th EWM Summer School for PhD Students

6-10 June 2011, Leiden, the Netherlands.

The summer school is aimed at a broad audience and will be divided into 3-topics; Logic, Geometry and History of mathematics (with a focus on women and mathematics).
Besides the lectures, there will be plenty of possibilities to meet each other mathematically as well as socially.

Scientific committee:

Mai Gehrke	Radboud University Nijmegen	Logic
Sylvie Paycha	Université Blaise Pascal	Geometry
Tinne Hoff Kjeldsen	Roskilde University	History of Mathematics

Confirmed speakers:

Opening lecture

Robbert Dijkgraaf,	University of Amsterdam

Logic

Rosalie Iemhoff,	Utrecht University
Anca Muscholl,	Université Bordeaux, France
Carol Wood,	Wesleyan University, USA

Geometry

Ana Cannas da Silva,	Technical University Lisbon, Portugal
Lisbeth Fajstrup,	Aalborg University, Denmark
Claire Voisin,	Centre National de la Recherche Scientifique, Institut de Mathématiques de Jussieu, France

History

June Barrow-Green,	Open University, United Kingdom
Jeanne Peiffer,	Centre National de la Recherche Scientifique, Centre Alexandre Koyré, France
Ida Stamhuis,	VU Amsterdam

We thank the following organizations for partial funding:

Stichting Compositio Mathmatica and
Research cluster DIAMANT Discrete, Interactive and Algorithmic Mathematics, Algebra and Number Theory.

More information will soon be available on our website, the link will be there on the EWM website.

Organizing committee:	Dion Coumans	Radboud Universiteit Nijmegen
	Erwin Dassen	Universiteit Leiden

UPCOMING EVENTS

CALL FOR PROPOSALS: Mathematics education

TURNING DREAMS INTO REALITY: The 11th International Conference of the *Mathematics Education into the 21st Century Project,* 10-16 September 2011

The conference will take place from 10 to 16 September 2011 at Rhodes University, Grahamstown, South Africa. The title of the conference is *Turning Dreams into Reality: Transformations and Paradigm Shifts in Mathematics Education*. The conference will open with an evening welcome reception on Sunday 10 September and close with lunch on Friday 16 September.

The Mathematics Education into the 21st Century Project has just completed its tenth successful international conference in Dresden, Germany, following conferences in Egypt, Jordan, Poland, Australia, Sicily, Czech Republic, Malaysia and the USA. The project was founded in 1986 and is dedicated to the planning, writing and disseminating of innovative ideas and materials in Mathematics, Statistics, Science and Computer Education.

Paper proposals are now invited on all innovative aspects of mathematics, statistics, science and computer education. The conferences are renowned for their friendly and productive working atmosphere. They are attended by innovative teachers and mathematics educators from all over the world: 44 countries were represented at the last conference. There will be an additional full social programme for accompanying persons. The chairman of the Local Organising Committee is Professor Marc Schafer of Rhodes University. For all conference details email Alan Rogerson (alan@rogerson.pol.pl), Chairman of the International Programme Committee.

The p-adic Langlands Programm, May 17-28, 2010, Princeton USA

The program will provide an introduction to the p-adic Langlands program.

The program is being organized by Sun-Yung Alice Chang, Princeton University; Ingrid Daubechies, Princeton University; Antonella Grassi, University of Pennsylvania; Tanya Khovanova, MIT; Chuu-Lian Terng, University of California, Irvine; and Karen Uhlenbeck, The University of Texas at Austin.

The lecturers of the program are Elena Mantovan of Caltech Pasadena and Rachel Ollivier of Versailles University for the Beginning Lecture Course, Ariane Mezard of Versailles University and Marie-France Vigneras of Paris VII University for the Advanced Lecture Course.

The main theme of this year's Women and Mathematics program is "p-adic Langlands program" – relating the p-adic representations of Galois groups with those of linear groups to solve problems in number theory. In the beginning course the basic notions of p-analysis, of Galois groups and of representations of finite groups will be introduced. The advanced course will concentrate on studying the p-adic representations of p-adic Galois or linear groups. There will also be review sessions, plenty of research seminars and two colloquium talks.

Women and Mathematics is a joint program of the Institute for Advanced Study and Princeton University.

http://www.math.ias.edu/wam/2010

The 15th General Meeting of EWM, September 2011, Barcelona, Spain

Details will follow soon.

DOING THE MATH

According to a recent article in the Wall Street Journal, the best job in the US is mathematician. The article describes a study which evaluates 200 professions to determine the best and worst according to five criteria inherent to every job: environment, income, employment outlook, physical demands and stress. The top 5 and bottom five jobs are shown below.

The Best	The Worst
1. Mathematician	200. Lumberjack
2. Actuary	199. Dairy Farmer
3. Statistician	198. Taxi Driver
4. Biologist	197. Seaman
5. Software Engineer	196. EMT

The article is available at http://online.wsj.com/article/SB123119236117055127.html

It seems as though 14 out of the 20 top ten jobs could potentially have a significant mathematical component. All the more reason to encourage women to take up careers involving mathematics.

USEFUL LINKS AND CONTACTS

EWM website:	http://ww.math.helsinki.fi/ewm/	
EWM convenor:	Marie-Françoise Roy	marie-francoise.roy(at)univ-rennes1.fr
EWM deputy convenor:	Frances Kirwan	kirwan(at)maths.ox.ac.uk
EWM email list:	Olga Lukina	ol16(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

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://ww.math-jobs.com

Membership renewal: Direct transfer of the membership fee can be made to the EWM bank account. For details, please contact Camilla Hollanti at cajoho(at)utu.fi