# A pictorial history of EWM

**By Bodil Branner and Caroline Series** 

**Presented in Barcelona, September 2011.** 

# EWM European Women in Mathematics

Founded in 1986 to support,
 encourage and bring

- encourage and bring together women mathematicians across Europe
- Membership organisation open to all
- Organises biennial general meetings and other local or specialist conferences
- Has members and coordinators in 32 countries
- Has email net, newsletter and website





### **EWM** Aims

- to encourage women to study mathematics.
- to support women in their careers.
- to provide a meeting place for like-minded people.
  to promote scientific communication.
- to cooperate with groups and organizations with similar goals.



Ingrid Daubechies EMS Lecturer EWM Meeting, Novi Sad 2009



Current Convenor Marie-Françoise Roy

## **Organisational Structure of EWM**

### Newsletter

Elena Resmerita, Austria

Sara Munday, UK

### Convenor and Deputy Convenor

Marie-Francoise Roy, France Frances Kirwan, UK

### Treasurer

Camilla Finland Hollanti,

## Standing Committee

Lisbeth Fajstrup, Denmark Ruth Kellerhals, Switzerland Sylvie Paycha, France Daniela Popova, Bulgaria Sanja Rapajic, Serbia Magdalena Rosak, Poland

### International Coordinators

Natasha Balashevich, Belarus (Central and Eastern) Irene Schhira, Malta (Southern and Western) Camilla Hollanti, Finland (Global) Email net, Web page

Olga Lukina, UK

### **Regional coordinators**

## 32 countries:

Austria, Belarus, Bosnia & Herzegovina, Bulgaria, Croatia, Denmark, Finland, France, Georgia, Germany, Great Britian, Greece, Hungary, India, Ireland, Italy, Lithuania, Macedonia, Malta, Moldova, Montenegro, The Netherlands, Norway, Poland, Romania, Russia, Serbia, Slovakia, Spain, Switzerland, Turkey, Ukraine

## **Other coordinators**

Links with AWM, EMS, Emerging countries

### **European Women in Mathematics 2007**

Centre for Mathematical Sciences, Cambridge, UK 3rd to 6th September 2007 www.maths.cam.ac.uk/ewm ewm07@maths.cam.ac.uk

#### Plenary Speakers

Ana Achucarro, Lorenz Institute, Leiden: Theoretical Physics Toni Beardon, Cambridge: Globalisation and Mathematics Education Natalia Berloff, Cambridge: Quantum Fluids Lenore Blum, Carnegie Mellon: Theoretical Computer Science Simone Gutt, Univ. Libre de Bruxelles: Symplectic Geometry Eleny Ionet, Stanford: Symplectic Geometry Dusa McDuff, SUNY Stony Brook: Symplectic Geometry Cheryl Praeger, University of Western Australia: Group Theory Vera Sos, Budapest: Combinatorics Ramdorai Sujatha, Tata Institute, Mumbai: Number Theory

EWM 2007 is the 13th General Marting of European Women in Mathematics Far more information about EWM, see warw.math.helsinki.fi/EWM/

#### Programme

Plenary talks Splinter and poster sessions Receptions at Newnham and Trinity Colleges Discussion on the role and future of EWM Conference banquet at Trinity College Punting on the River Cam Accommodation at Fitzwilliam College

#### Sponsors

EPSRC women@CL project Trinity College Cambridge Newnham College Cambridge Engineering and Physical Sciences Research Council London Mathematical Society Edinburgh Mathematic Cambrid Schlumberger

## Biennial general meetings

### Novi Sad, Serbia. August 2009

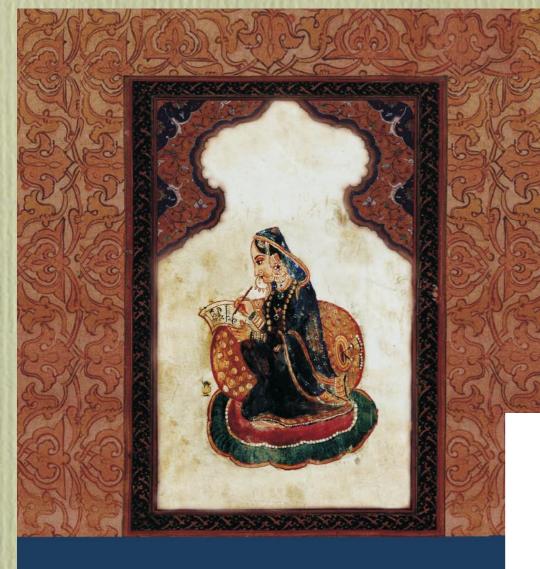


Schlumberger Cambridge UK September 3-6, 2007

# **Biennial Meetings**

- Paris 1986
- Copenhagen 1987
- Warwick, UK, 1988
- Lisbon 1990
- Marseille 1995
- Trieste, Italy 1997
- Loccum, Germany 1999

- Malta 2001
- Luminy, France 2003
- Volgograd, Russia 2005
- Cambridge, UK 2007
- Novi Sad, Serbia 2009
- Barcelona 2011
- Bonn 2013



### International Conference of Women Mathematicians



University of Hyderabad, India http://www.icwm2010.org.in http://www.icm2010.org.in adan.icwm2010@gmail.com

Congresses

# **Other EWM activities**

### Summer Schools



2011/1

EUM

25th Anniversary

MATHEMATICS

**Newsletter 18** 

**News**letter

# The beginning

n.,

EWM began at the International Congress of Mathematicians in Berkeley, August 1986.

ORGANIZED BY THE

Association for Women in Mathematics

Panel

WOMEN IN MATHEMATICS:

AN INTERNATIONAL PERSPECTIVE

EIGHT YEARS LATER

International Congress of Mathematicians University of California, Berkeley

Wednesday, August 6

7:30 -- 8:30 p.m.

Physical Science Lecture Hall

Participants Include:

Josefina Alvarez-Alonso (Argentina)
Lenore Blum (USA), Moderator
Bodil Branner (Denmark)
Marie-Francoise Coste-Roy (France)
ت Gudrun Kylmbach (Federal Republic of Germany)
Bokunola Osibodu (Nigeria)
Maria Jose Pacifico (Brazil)
Reiko-Sakomoto-(Japan)
Janoite - Jenny Seberry (Australia)
Caroline Series (England)

There will be a **RECEPTION** immediately following the Panel Discussion.

If you are interested in more information about AWM while attending the Conference, please feel free to talk to Linda Keen the President, Bettye Anne Case the Meetings Chair or any member of the Local Arrangements Committee: Lenore Blum, Lisa G<u>oldberg</u>, and Evelyn Silvia and Strategy and

> ASSOCIATION FOR WOMEN IN MATHEMATICS Box 178, Wellesley College Wellesley, Massachusetts 02181

### EUROPEAN BRANCH OF THE ASSOCIATION FOR WOMEN IN MATHEMATICS

At the International Congress in Berkeley this summer, the AWM organised a panel discussion on the situation of women mathematicians worldwide. A full account of the meeting is to be found in the September AWM newsletter, obtainable from AWM, Box 178, Wellesley College, Wellesley, MA 02181, U.S.A. As a result of that meeting, it was decided to form a European branch of AWM.

A preliminary working meeting to discuss the form which this organisation should take will be held in Paris, on December 13th-14th 1986. Anyone who would like to participate in this meeting, or who has suggestions relating to the organisation, or who would be interested in joining or receiving future mailings should contact either Caroline Series, Mathematics Institute, Warwick University, Coventry CV4 7AL or Dona Strauss, Department of Mathematics, University of Hull, Newland Park, Hull HUS 2DW.

in

# The next steps

EUROPEAN WOMEN IN MATHEMATICS

EWM MEETING

December 12-13, 1987, Copenhagen (Lyngby).

BRIEF REPORT ON THE

#### EWM MEETING

DECEMBER 12/13, 1987, COPENHAGEN

The second meeting of the Buropean Women in Mathematics was attended by 22 participants from nine countries and reports were given about the situation in each country,

A detailed report will be written by Catherine Goldstein, Dépt. de Math., Univ. de Paris XI, F-91405 ORSAY, Codex. It will be distributed by Marion Kimberley, Goldsmiths' College, Lewisham Way, LONDON SE14 5NW, England. Marion also has a list of the national coordinators.

Ragni Piene from Oslo Universitet gave an invited address on "Some differential-geometric aspects of algebraic geometry". Several committees have been formed for special issues. The next meetings are planned for

> Warwick, England, November/December 1988 Lisboa, Portugal, 1989 and provisionally for 1990, Roma, Italy,

The meeting was partially supported by the Danish Ministry of Education, the Danish Natural Science Research Council, the Danish Social Science Research Council, the Otto M@nsted Foundation, private donations and the Technical University of Denmark.

Detailed report of the second annual 1. Kalmbach

Uport to howe

(G. Kalmbach)

(Marketa Novak)

Copenhagen December 1987 22 women from 9 countries

#### Universität Ulm Abteilung für Mathematik III Prof. Pr. 6. Kalmbach

0-7900 Ulm, den Now. 11, 1986 Oberer Eselsberg F: (0731) 176 - 2928

Dear Caroline

this is our second circular letter concerning our first meeting of the A. W. M., European Branch. It will be in

Paris, Institut Henri Poincaré (IHP), Rue Piere et Marie Curie (near the Luxemburg) December 13, (Saturday) 1 pm to December 14, 1 pm

If you did not write to me up to now: please return the attached form if you want to attend the meeting. Everyone should make her own hotel reservation. The tentative schedule is:

Dec. 13: 1 - 1:45 pm Bodil Branner "Iteration of Complex Polynomials" 2 - 2:45 pm Gudrun Kalmbach "Measures and Orthomodular Spaces"

3 - 6:30 pm General Meeting

Dec. 14: 10 - 10:45 am Marie-Francoise Coste-Roy "Les Ecoles Normales Supérieure of Rue d'Ulm and of Sèvres"

11 - 1 pm General Meeting.

Specific topics for the discussion (to be completed) and general meeting are: (a) The future of scientific education for girls.

- (b) Why do women take a longer time than men to aquire self-confidence? (Michelle Schatzman)
- (c) Discussion on the french "competative examination". (M.-F. Coste-Roy)
- (d) Discussion on an "European Statute" for the European Branch of A. W. M.. (G. Kalmbach)
- (e) Vote for a committee: chair, vicechair, treasurer, secretary. Volunteers until now are: B. Branner (Denmark), M.-F. Coste-Roy (France), G. Kalmbach (W-Germany), D. Strauß (England).

On behalf of the temporary committee, sincerely yours,

Gudom Kalmback

(Gudrun Kalmbach)

Paris December 1986 At least 10 women from at least 5 countries

#### Second Announcement

Third Annual Meeting of European Women in Mathematics.

Warwick University, Coventry, England,

December 10th - 12th, 1988.

The programme will consist of:

#### (i) Expository talks

The third day of the conference (Monday) will take the form of an open mathematical meeting. There will be talks on research mathematics given by women prominent in their fields.

#### (ii) Meeting for local schoolgiris

On the Sunday afternoon fifth and sixth form girls from local schools will be invited to attend the meeting. There will be a mathematical talk followed by tea and general discussion.

(iii) General Discussion: Family versus career This theme was selected as a result of overwhelming demand at the

last annual meeting in Copenhagen.

(iv) Business Meetings for EWM. These will be to discuss the possibilities for future action and various organisational and constitutional questions.

(v) Social events.
An evening out for a meal will be organised on Sunday.

More details of the programme and a report on the last annual meeting are available on request from the organisers (Sarah Rees and Caroline Series at the Mathematics Institute, University of Warwick, Coventry,

# Warwick ecember 1988 43 women from 13

43 women from 13 countries EUROPEAN CONFERENCE of WOMEN in MATHEMATICS



10-12 DECEMBER 1988 UNIVERSITY of WARWICK ENGLAND





#### EUROPEAN WOMEN IN MATHEMATICS

This organisation is an affiliation of women in Europe bound by a common interest in the position of women in mathematics. We are a sister organisation of the American Association for Women in Mathematics. Our purposes are:

To encourage women and girls to take up and continue their studies in mathematics.

To support women with or desiring careers in mathematics or mathematics related fields.

To provide a meeting place for these women.

To promote equal opportunity and equal treatment of women in the mathematical community.

To cooperate with groups and organisations, in Europe and elsewhere, with similar goals.

Our organisation was conceived at the International Congress of Mathematicians in Berkeley, August 1986, as a result of a panel discussion organised by the Association for Women in Mathematics, in which several European women mathematicians took part. There have since been three European meetings, the first in Paris in December 1986, the second in Copenhagen in December 1987, and the third in Warwick (England) in December 1988. The fourth meeting will take place in Lisbon in December 1989. The fifth meeting is provisionally planned for Italy in 1990.

At the time of writing, there are participating members in the following countries: Denmark, Finland, France, Greece, Italy, Netherlands, Norway, Poland, Portugal, Spain, Sweden, Switzerland, United Kindom, West Germany, and contacts in Czechoslovakia and Hungary. Activities and publicity within each country are organised by national co-ordinators. Each country or region is free to form its own regional or national organisation, taking whatever organisational or legal form is appropriate to the local circumstances. Such organisations already exist in France (Femmes et Mathématiques), Scandinavia (The Nordic Group) and at Warwick University, England (Warwick Women in Mathematics). Details of the activities of these groups can be obtained directly from their organisers. Other members are encouraged to consider the possibility of forming such local, regional or national groups themselves.

For further information please contact your national co-ordinator or the general co-ordinator Dr. Marion Kimberley, National Heart and Lung Institute, Dovehouse Street, London SW3 6LY, England. Tel: 01-352-8121 ext.3057.

# Getting organised



Between 1987 and 1991 we set up our basic structure of convenor, standing committee and regional co-ordinators. By 1993 we had established an office in Helsinki and were registered as a legal organisation in Finland ... as the EMS had been in 1990.

# Luminy December 1991

# **Getting publicity** and having fun!



What do we want from a maths talk?

CONFÉRENCE JUSQU'AU 13 DÉCEMBRE Elles préfèrent les maths

SOCIETE

Ni oiseaux tares, ni phénomènes de la nature. Elles ont fait des maths leur passion et leur vie professionnelle. Elles sont actuellement une cinquantaine de mathématiciennes, renues de l'Europe entière, au campus de Luminy, pour réfléchir sur le thème "les femmes et les mathématiques". Vaste sujet.

grouse gaunes au les pro-blimet logaritherigens. Le comble, c'est quand Marie-Pracquise affirme être ve-

ROFESSION: mathémati dran, Maria Drm-Capi Corries, Tra-, Cubrice Rodingin, Françuise Roy, Jao-thomatica Contact, Jao-thomatica Contact, Jao-thomatica Contact, Jao-Haria Drm-Capi Corries, Jao-Haria Souti Contact, Souti Taria Spaini Contact, Souti Capital Contact, Souti Taria Spaini Contact, Souti Statistica Statistica Spaini Contact, Souti Statistica Spain 10. 21 pers, an imperial tencement sources pendant inan dudes on dans lew or-sell., Ga limity les partitils rés!" Par conter, dia anniei, de matha après le bar, pi quellos Déurs arriver tout duals de Prague, de Madrid et de France. Elles sont des emmes de tiente-claq documpte et un son. Chovera Mands, brazs, sys-li-ger, gamara, angles verais multiplic in sixtuse. Aujeurd'h bi, ...elles evozen Samar" to fa-sol ég caths but heues "patters", slica partament sae ntme passion, ire

Marie

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profe ant sté une serie de modèle". ......



The sun month of a pa-rese. "C'était telément fo-cile par moi, à l'époque du licée, que je me suis listade picer traquillement, and beautop de pastion, mais beautop de pastion, mais beautop de pastion, mais beautop de pastion, mais beautop de pastion and beautop de pastion de part affante, pour se part, aveir crateté à question à quinze cine d'un nonigre di ficile à capation. C'est sant d'embiches et d'obriacles. une, comme par dél : 7/ y a . tellement peu de femmes mathématiciennes que Main quelle joir quard on emite av scremet et cu'on dicount an paysage fabre maternasternnez que ribal pue facor de se divin-gues. El conune, o l'Apaque, j'hair peste envis groue, que compensau mes dificultes. A l'école, les professeur de Elles fort 5 des gebls esphis mascelles qui considè-rant que "les maries d'est trop compliqué pour une femme", es elles pessept matte de Capi avaien l'air bans et gindrent : 76 des ésé une sorte de roadie, des unes tranition des éques symboles at valeurs pariti-

tore le mode, le portinage, Jer bringlage et l'éducation des collans. Le plur embé tant, toutigne Murie, c'est guard es au au plure re-Selon ces dames, nour Seine en danne, pour Eine une bonne natheuse, instile d'avoir is bonne. Il scaffe d'ave finaginative, quinitire, anugle, agressive, firstible, entbousieste el Sente a qu'il fast s'anitat è cise have sonne un sour

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le response primero alla licut encore primero in-ricolica. De phis, ter-unies habitanti ora fall causaraire der medioas et decourtent expone-

"Les methe 7 C'ss

TRAFIC DE VOITURES

La filière des allemandes démantelée

Dear colleague,

As you know, our program in Luminy will include a discussion on mathematical talks: what we want from them, what they are really used for and how to change them. In order to make our discussion more constructive, we suggest that future participants think over these questions before December, 1991; we have therefore prepared a little questionnaire about talks which we hope may help you define your needs and your thoughts on certain points. Please try to fill it out at some talks you may attend (different types of talks and seminars could inspire different answers, so don't hesitate to fill it out several times on separate pieces of paper!). We would like to receive your answers (and commentaries) before the end of October, 1991.

The organizers

here 13.

Les Pennes :

grand loto

d'action pour le tupnel L'Association perinise pour la protoction des sines (APTS) orp-nise, decusto à 20 h 30, saile Tipo-Rosal, au

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reseate d'an month

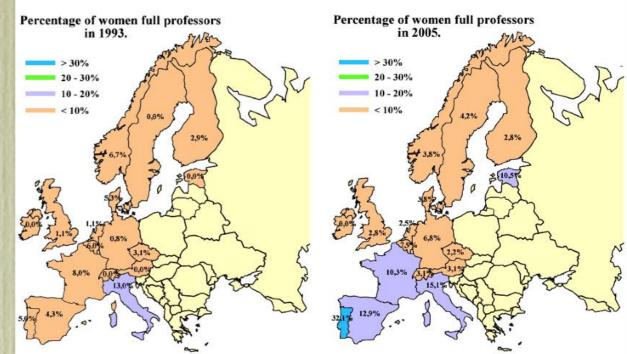
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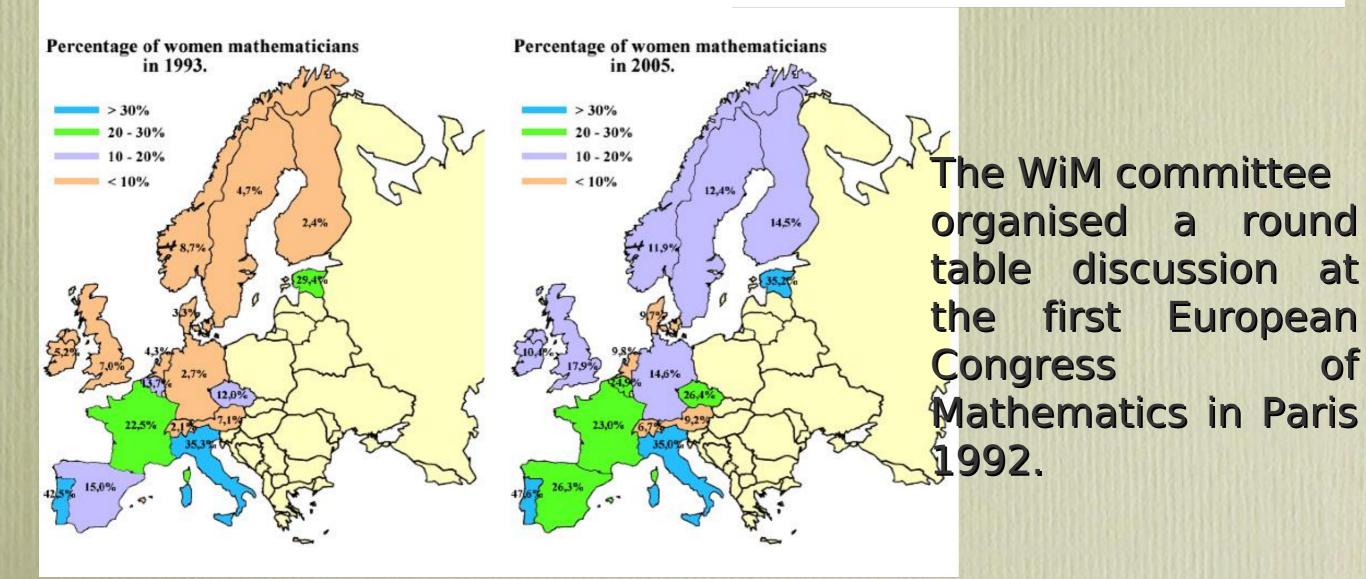
scot décides à ac pas baisser les bras

Mirebesu.

## **Statistics**

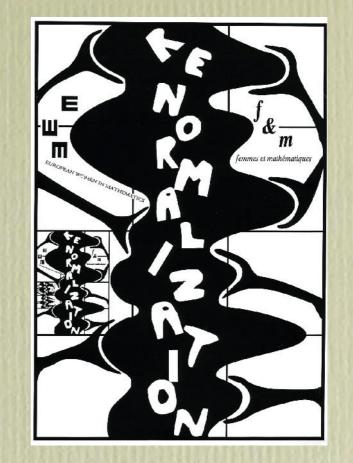
In 1991 Eva Bayer suggested that the EMS set up a Women in Maths committee. With EWM's help, they collected statistics about women mathematicians across Europe.





EWM continued with a main meeting every two years and other events between.





Paris 1996 - Workshop organized jointly between EWM and f&m (Femmes et Maths)

Madrid 1995 46 women from 14 countries During the Madrid meeting a video was filmed on the initiative of Marjatta Näätänen Vomen and Mathematics across Cultures

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GK

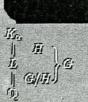
First EWM video

Also exists on DVD

EWM - European Women in Mathematics



EWM, Department of Mathematics, P.O. Box 4, 00014 University of Helsinki, Finland



The round table discussion was focused on Women and Mathematics across Cultures.

The WiM committee of EMS organised a round table discussion at the second European Congress of Mathematics in Budapest 1996

> $(f^*g)_{ab} \equiv g'_a$  $j'_{ab} = \sum_{c,d=1,2} g_{cd} \frac{dx}{dy^d}$ CC 18A CO Diff(A) × Me (6.9)  $\Delta v = \sum_{(i)} v_{(1)} \otimes v$ g(s) = f(s)g(s) $C(\Lambda)/Diff(\Lambda)$  $[g] \equiv \{ x^{\varphi} y, \psi \in M$  $Mei(\Lambda)/W(\Lambda)$  $H: W(A) \times I$ (e<sup>se</sup>, j  $A(w \circ f, f^*g) = A$  $"Z = \int_{Emb(\Lambda)}$

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Women and Mathematics across Cultures

EWM - European Women in Mathematics

A video made by European Women in Mathematics.

Why are there many more women mathematicians in Italy and Brazil than in Norway, England or Germany? What is it about Latin culture that encourages women mathematicians, while that of Northern Europe mitigates against them?

Mathematics is a universal and cross-cultural discipline; European Women in Mathematics is the organisation which supports women mathematicians right across Europe. Gathering statistics and comparing experiences raises many fascinating and unexpected questions about the effects of traditional cultural values on women's role in the modern world.

This video explores the impact of cultural differences on the female condition by allowing four women mathematicians who have studied and worked in Europe and North and South America to tell their stories.

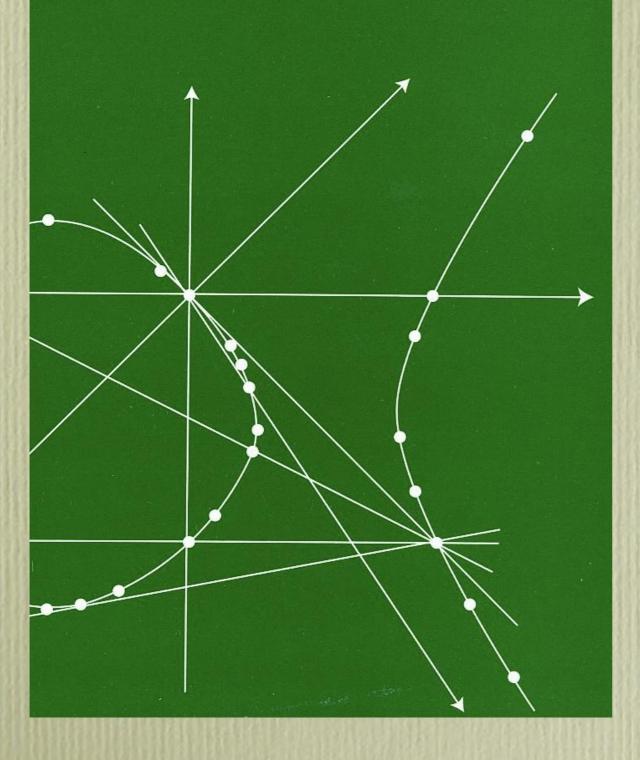
Following a five minute introduction to EWM, including some surprising statistics about women mathematicians in Europe, the four women recount their personal experiences.

This thought provoking video should stimulate a novel discussion about the impact of cultural influences on the status of women, with implications extending well beyond the world of mathematics.

Length: 25 minutes. Directed by Marjatta Näätänen in collaboration with Bodil Branner, Kari Hag and Caroline Series, 1996.

http://www.math.helsinki.fi/EWM

International Centre for Theoretical Physics Trieste, Italy, 12–17 December 1997



Trieste 1997 98 women from 30 countries (150 applicants)

Most European countries as well as Chile, Egypt, India, Iran, Kyrgystan, Nepal, Tunisia, Uzbekistan, the West Bank

The ICTP supported fully three women from developing countries to participate in the EWM meeting and to stay ICTP as visitors for two months.

### In 1994 we set up an email net and in 1997 we announced a web page!





Loccum 1999 50 women from 13 countries

Michele Vergne EMS Lecturer 2001, Malta

Malta 2001 76 participants from 21 countries and 4 continents





Cambridge 2007 85 women from 25 countries

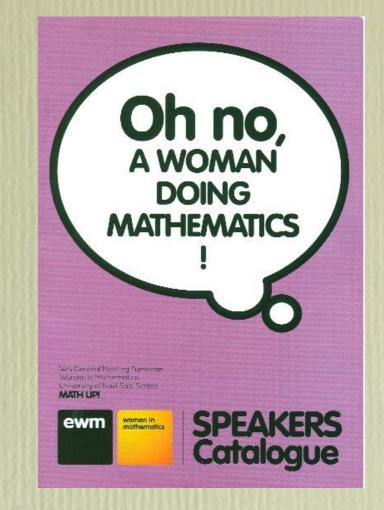
# Committee

Following the Cambridge meeting we worked with the EMS Women in Maths committee to set up a group of leading women mathematicians to advise on scientific programmes and speakers for EWM meetings and other related events. We are coordinating about our web presence and other matters.

Collaboration with the EMS Women in Maths **EMS-EWM** Joint Scientific Committee

- Viviane Baladi (ENS, Paris)
- Eva Bayer Fluckiger (Lausanne)
- Christine Bessenrodt (Hannover)
- Alessandra Celletti (Rome)
- Cornelia Drutu (Oxford)
- Isabelle Gallagher (Paris) Chair
- Sara van de Geer (Zurich)
- Antonella Grassi (U. Penn, USA)
- Ursula Hamestädt (Bonn)
- Dusa McDuff (Stony Brook, USA)
- Ragni Piene (Oslo)
- Ulrike Tillmann (Oxford)





In 2009 we had a wonderful meeting in Novi Sad, Serbia. 70 women from 25 countries came.

Ingrid Dabechies 2009 EMS lecturer gave 3 of her lectures at our conference.

All lectures were filmed and there is an EWM promo video on YouTube.



One of the main pleasures we have had from EWM has been working with and getting to know so many wonderful women from so many different places and backgrounds. It has been enormous fun and has formed a wonderful and rich backdrop to our mathematical lives.

We are always pleased when people want to get more involved.

EWM can't survive without the active involvement of its members. EWM is what we make it!

If you would like to be more involved in the organisation in any way or to share your ideas, do let us know!