European Mathematical Society Committee for Developing Countries

ANNUAL MEETING, 14 APRIL 2012 in LIMOGES

(beginning at 1020)

Members, associates and guests present at the meeting:

Leif Abrahamsson (LA) Giulia di Nunno (GDN) Herbert Fleischner (HF) Nick Gill (NG) Andreas Griewank (AG) Gert-Martin Greuel (GMG) Michel Jambu (MJ) Fabrizio Luccio (FL) Marie-Francoise Roy (MFR) Joana Teles (JT) Michel Thera (MT) Tsou Sheung Tsun (TST) Paul Vaderlind (PV) Begoña Vitoriano Villanueva (BVV) Michel Waldschmidt (MW) Anders Wändahl (AW)

Excuses from Anna Fino, Ramadas Ramakrishnan Trivandrum, Mireille Martin-Deschamps, Claude Cibils, Lars Andersen, Bernd Wegner, Gert Sabidussi.

A silent minute was held for Mikael Passare who passed away in September 2011.

AW clarified that the cause of MPs death was a major cardiac arrest rather than an accident (as was reported initially).

(1) Welcome

TST welcomed everyone and expressed sincere thanks to MT for hosting the meeting.

Individual presentations.

(2) Minutes of the last meeting in Madrid

A few follow up questions:

PV: Have anyone approached Google for possible funding? No, not yet...

MFR have received money and has good personal connections with Google and will explore the possibilities in a delicate way.

GMG: Important to 1) find a specific programme that fits 2) have personal contacts.

MW raised the question about approaching L'Oreal for projects specially geared towards women.

TST: CIMPA has tried 3 times without success.

MW pointed out some typos and minor corrections.

The minutes were approved.

(3) Summary report of activities in the past year

The reports for the EMS were sent out to committee members in advance of the meeting as well as posted on the website http://ems-cdc.org

Report to EC 11.11

Updates, comments and discussions:

TST: We are receiving personal contributions. The online donations are coming in and we actually receive money that way.

IMU has donated 3200 USD for shipping of 10 boxes of Math Reviews to PACM. Clay Institute has also paid shipping for book consignments.

LA: IMRN International Mathematics Research Notes (5 boxes) are to be sent to PACM.

Philibert Nang winner of the Ramanujan prize 2011 has expressed the need of books at mathematics departments in Gabon.

AW: Don't spend too much shipping on journals, but concentrate on books. Journals are in many cases available online.

GMG: Oberwolfach reports are available online as open access when accessed from the workshop pages. The compilation of all reports are however available through subscription. This resource could be available for key institutions in developing countries for free.

GMG: Lack of use of Zentralblatt at many developing institutions. Printing of posters informing on the availability could be a way to promote use.

LA: Reference databases like Zentralblatt and MathSciNet are likely to be used mostly at institutions with inhouse PhD training.

MFR: Workshops on how to access electronic math information at the CIMPA schools would be advisable.

AG: Call from BMBF Bundesministerium für Bildung und Forschung could be a source for funding of these workshops – AW, MW, GMG will explore this possibility

GMG: Access to Zentralblatt for all CIMPA schools is a possibility. Inform Zentralblatt well in advance.

AG: Has tried to add Germany to CIMPA. Contact with DMV hasn't worked out so far though. (A German member in the scientific committee of CIMPA is needed).

(4) Financial Report, April 14, 2012 (PV)

The balance after the last meeting: 29.740 €

Deposits since last year meeting 343,75 € Springer Verlag (19.04.2011; CDC account) 178,78 € Springer Verlag (13.01.2012; other EMS account) 161,00 € (donation via EMS website) 66,20 € (refund from Marie-Francoise Ouedraogo) 59,74 € 05.12.2011; Nordea Bank, Interest In total: 809,47 €

Withdrawals since last meeting

9,40 € Bank Expenses

410,00 € 14.07.2011; Marie-Francoise Ouedraogo (Congrès des Femmes Mathématiciennes Europèennes)

1.700,00 € 23.11.2011; M. ou Mme Schindler (ICM in Bangalore)

1.079,38 € 05.04.2012; Anders Wändahl (Workshop in Phnom Penh)

In total 3.198,78 €

The current balance is 27.350,69 €

TST: We get continued support from Zentralblatt. Thanks to Zbl and its reviewers. In general we should spend more money!

(5) CDC webpage

MW: Webpage started over one year ago. Have asked for individual reports. Eventually they came. Thanks to NG for revitalising the webpage.

NG: If we want a more dynamic editing of the webpage we would need to put the page in a CMS (Content Management System). Do we want that? Server space? Who would like to edit? Two or three people? We could add announcements, agendas, minutes etc. in a more swift way.

AG: Go for the low-tech solution

MFR: Why not use the EMS-webpage?

TST: It's not so easy. We have tried that.

[At this point we realized that the EMS webpage was put on the versatile Drupal CMS]

With this new information at hand we decided to make another effort to use the EMS-webpages. NG will contact EMS.

GMG: Would like to see a link to Zentralblatt announcing free access for developing countries.

(6) Membership and next chair

AG, MT and TST are to step down after their second term.

TST: We need at least 4 people

Suggestions of suitable candidates:

GDN: Mihail Zervus

AG: Sebastian Sager, Natasa Krejic, Gerhard Weber

BV: Matti Helio

Discussion: Why not recruit members from "Eastern Europe"?

TST: Potential members must have a decent economic situation. We don't want to spend CDC money on members' trips to meetings.

LA: It's a problem if this condition prevents good people (that can contribute to the work of the committee) being members.

GDN: Partial support could be considered for airfare for Eastern European members.

TST: The money is raised under conditions that all money should be spent *in* developing countries.

TST: When looking for members we better look for people that can fund their own trips.

LA: Maybe funds from central EMS?

TST: Not likely.

W has been voted internally and recommended unanimously as chair. The recommendation has been

passed to the EC for approval.

- M GDN will be new vice chair.
- PV will be treasurer.
- TST, AG, MT will end their second periods by next year and were elected as associate members from 2013.
- M NG was elected as associate member.
- Bernd Wegner has agreed to remain associate member.

As for associate members we have no fixed number – we have work to be done and the more the merrier!

(7) 6ECM at Krakow

AG will arrange a two hours round-table on "The role of mathematics in the emerging economies" at 6ECM.

AG: Ideally participants from the BRIC countries + South Africa + Mexico. China is a difficulty; no one seems to be willing to represent the whole nation in this regard. I anticipate a "goal oriented debate".

MFR: Makes sense having a person from Africa, maybe Morocco.

LA: Someone from Thailand? They are networking in the area.

MT: Morocco would be good.

AG: Maybe Tunisia or Algeria would be better.

GDN: I have a name from Tunisia.

LA: Success factors? What made the emerging economies emerging? Contributions from mathematics? How?

PV: Expected contribution from the panellists at the round-table?

AG: Will provide a set of questions? Which role did mathematics play in the economic success?

PV: Thailand is a good example of where mathematicians may have played a crucial role in the emergence of the economy.

MW: Outcome? A report?

AG: Yes!

MW: Good!

LF: Tunisia is the leading country in Northern Africa and has a strong position when it comes to connections to other Arabic countries.

(8) Individual activities: all members and all associates

(including reports from absent members)

Report from BVV:

- Master on Statistics in El Salvador: master in 2 courses, official master of Universidad de El Salvador with some lecturers from Spain:
 - 2008-2009: most of them Spanish Teachers
 - 2010-2011: most of them Spanish teachers assisted by teachers of El Salvador.
 - Next times it will be with local teachers with some Spanish one
 - Two grants in 2010 for master students in Madrid (supported by the project). One of them now is studying

his PhD. with a grant of Spanish Cooperation.

- Library (new books).
- The master programme has been supported by projects of the Spanish Cooperation and Complutense University. August 2012 is finishing the cooperation Project (now we are involved in master thesis).
 - Responsible person: Begoña Vitoriano
- Master on Statistics in Mozambique: master in 2 courses, official master of Universidade Pedagogica de Mozambique:
 - 2012-2013: all teachers are Spanish
 - 2014-2015: all teachers Spanish assisted by teachers of Mozambique
 - Next times it will be with local teachers with some Spanish one
- 2 grants for master studies in Madrid (2012-2013), 2 grants for PhD in sandwich format (2013-2015), 2 grants for master studied in Madrid (2014-2015).
 - Library and computers support
 - 2012 supported by Complutense University and Spanish Cooperation
 - It is supposed that Spanish cooperation project is for 4 years with yearly renewal...
 - Before the master, there were two postgraduate courses in order to ensure the viability.
 - Responsible person: Begoña Vitoriano
- Indo-European Study Group in Baroda (India): May 2011. Organised by Matti Helio (Laaperanta University).
- Master programmes in Paraguay: CE-MAT has supported by a Spanish cooperation project a master programmes in Paraguay in Mathematics and Statistics. That one in Statistics is finished and it looks that it is not to be continued. That one in Mathematics are trying to be continued by a master programme in Applied Mathematics. Responsible person: Marisa Fernández (Pais Vaco University) and Jose Arrieta (Complutense University)
- Master programme in Senegal: with CIMPA and Spanish Cooperation support. Responsible person: Mercedes Siles (Malaga University)
- Courses for secondary teachers of remote areas in Nicaragua (Complutense and Universidad de León, and GIRA network): courses to prepare teachers of secondary schools of remote areas in order to prepare their students for university access. Supported by Complutense University. Responsible person: Juan Tejada (Complutense). 2010-2012
- Courses for secondary teachers of vulnerable areas of Caracas (Complutense and Universidad de Venezuela): courses to prepare teachers of secondary schools of vulnerable areas of Caracas ("ranchitos") in order to prepare their students for university access. Supported by Complutense University. Responsible person: Inés Gómez (Complutense).

Report from AW:

Have held two workshops "Finding Online Information in Mathematics", one held at Universidade Eduardo Mondlane in June (funded by the ISP) and another held in Phnom Penh for students at RUPP and Ministry of Education, Youth and Sports (financed by EMS-CDC and IMU).

I will try to put the content of the workshop on the web, probably in the Moodle Courseware software, for distant learning.

For full report, see http://ems-cdc.org, under header "Reports".

Report from PV:

- The project "Books for Master courses" in Mauritania was partly a success. We send about 25 letters to different publishers around the world asking for donations of relevant books from Mauritanians "wish-list". About 15 publishers answered in positive terms and sent the books to Nouakchott. However the situation in Mauritania has changed slightly since our contact there, the vice chancellor Isselkou Ould became the head of the office of the President of Mauritania. The creation of the Master program in Nouakchott is now put on ice but the books are there.
- I did my usual lecture-tour to Phnom Penh where I taught 3 weeks in August 2011 an intensive Master class in Combinatorics.
- We have increased the Swedish engagement in S-E Asia (Cambodia and Laos). ISP launched ta sandwich programme with Cambodia and two RUPP students will start the PhD in Sweden the coming autumn. In March 2012 ISP participated in the 5th Conference on Mathematics Education in Developing Countries in Phnom Penh.

We visited also National University of Laos and discussed possibility of cooperation

- ISP visited NMC in Abuja and discussed the extension of cooperation. Three more students (1 Master + 2 PhD) from Nigeria will come to Sweden (the education fully covered by NMC).
- ISP participated in a meeting in Paris (in May 2011) about the AIMS node in Senegal. We had a meeting with them and discussed frames of cooperation between AIMS and PACM. The discussion continued during my visit to AIMS in Capetown in December 2012. Soon will we sign a MoU between our institutions.
- In January 2012 I visited National University of Rwanda in Butare. This was about a join engagement of math departments of Stockholm University and Linköping University in a Sida project in NUR. Mainly it is a question of Master education in mathematics, about 40 students per year.

Report from AG:

I am writing from the university of Thiess Senegal. During the last year I wasted considerable time through my involvement in AIMS Senegal and the VACAMO proposal in the Trilateral American-French-German Program. The president of AIMS considered the two as rival initiatives and had me removed from AIMS as well as keeping half the money from the VACAMOS proposal. Now he seems to have fallen from grace himself and in any case AIMS will have to set up good relations with the new Senegalese government. I have written a long report on this and can fill you in on details of interest over a glass of wine.

Yesterday I attended an open air concert by Youssou Ndour in Dakar on the occasion of the presidential changing of the guard in Senegal. I was one of very very few pale faces in jammed crowd that was clearly elated. As it grew denser and denser I eventually made my way out deperately holding onto my belongings. That was even before the great man started his act and today I read in the paper that there were 40 wounded. It seemed clear that even a minor stampede could kill hundreds.

I had landed here on Tuesday after the Sunday election and was worried that disputes about accumulating results might erupt exactly in those days. Fortunately the old man conceded hours after voting ended and everybody seems elated. Tomorrow is the national independence day, so there will be more celebrations. All this is sort of a vacation trip to get away from Berlin for a few days.

Naturally I have also talked with potential VACAMOS partners and I will meet Mary Nieuw Niane, a well known mathematician who was rumored to become Minister of Higher Education later this week.

I also visited Mongolia, China and Russia mainly for the attendance of conferences but some specific collaborations as well.

For the big International Symposium on Mathematical Programming in August in Berlin I am responsible for the support of participants from developing countries. We got a grant of 1500 Dollars from IMU and 2000 Euro from GAMS Development Corporation. Used the money mainly to halve or waive the registration fee of 300+ and 150 Euros for staff and students respectively.

I have two PhD students from North Africa/West Asia who I have a very hard time graduating. They had a week background and have not really caught up.

Currently there are various calls for grants out from the EU and the German government. Specifically, EduLink just came out and ACP-ST is expected soon. I participated in a preparatory workshop for prospective applicants by the DAAD in Nairobi last fall and used the opportunity to climb Mount Kenia (exactly: Point Lenana (4985 m) for people in the know). Lets stop on that high note.

Report from Anna Fino:

On March 2012 at the University of Lecce Anna Fino met Amirhesam Zaeim who is a Phd student from Payame Noor University, Teheran, Iran. He attended the PhD Course that she was teaching in Lecce. Anna Fino will try to keep in contact with Amirhesam Zaeim and his university.

Anna Fino is also from the last year in contact with Amine Bahayou from Universite Kasdi Merbah, Ouargla, Algeria. He just finished his PhD and in his small university, together with other people, he created a small working group around the themes of geometry and algebra. This is on some elementary topics: Differential Geometry (Lie groups and Lie algebras, connections and bundles), algebraic topology (homotopy and covering with the categorical language) ... for introduction and upgrading of teachers. He also prepared a project of Licence and Masters in geometry and algebra, for submission to the Scientific Committee. Anna Fino will try to give them advice for the selection of topics and teaching materials.

Report from Ramadas Ramakrishnan Trivandrum:

Funding (from the Italian government) has been stable. I hope organizations which are looking to encourage mathematicians from developing countries will consider working in cooperation with ICTP.

Fernando Rodriguez Villegas was recruited to lead number theory initiatives at ICTP and help consolidate

ties to South America. Originally from Argentina, he has been for many years at the University of Texas at Austin. With a strong research record and deep commitment to outreach, he is sure to enrich the Section in many ways; he is expected to join us this Fall.

Professor Maria José Pacífico from the Instituto de Matemática, Universidade Federal do Rio de Janeiro was appointed Staff Associate and is expected to work with Stephano Luzzatto to strengthen our activities in dynamical systems.

Many in the 2011 batch of Diploma students were placed in very good European graduate programmes – one (from Senegal) in the Ecole Polytechnique, two (Cameroon, Egypt) at the MPI, Leipzig, and two (Cuba, Mongolia) in the new ICTP/SISSA joint Ph.D. programme.

The Ramanujan Prize for 2011 was awarded to Professor Philibert Nang (Gabon).

In a novel initiative, we organized a short meeting in Rabat where a group of approximately 30 young women were introduced to themes from modern Mathematics. The highlight was undoubtedly the presence of Professor Michele Audin (Strasbourg) who – in addition to two talks with Mathematical themes - also gave the assembled students advice on Mathematics as a career choice for women. Three bourses were awarded.

We had, as in every year, around 100 visitors from developing countries; of whom around 10 were long-term (6 months to two years). We have now the second of two post-docs from ASSMS, Lahore. Both have been women.

Our Associates Programme continues to attract many applicants from around the developing world. FYI: Dr. Basang Tsering Xiao has been appointed an Associate this year.

Schools and Conferences in 2011:

- School and Conference on Modular Forms and Mock Modular Forms and their applications in Arithmetic, Geometry and Physics (28 February - 18 March)

Organizers: K. Bringmann, L. Göttsche, D. Zagier

- School and Conference on Mathematics and Physics of Soft and Biological Matter (2 13 May)
 Organizers: A. De Simone, J.-F. Joanny, T. Lubensky, S. Ramaswamy
 Local Organizer: Ramadas Ramakrishnan
- School and Conference on Computational Methods in Dynamics (20 June 8 July)
 Organizers: J. Guckenheimer, C. Simó, W. Tucker
 Local Organizer: S. Luzzatto
- Latin American School and Conference on Algebraic Geometry and Applications (ELGA 2011), (1 12 August) (External School/Conference in Buenos Aires and Córdoba, Argentina. Joint with CIMPA)
 Organizers: M.L. Barberis, F. Cukierman, A. Dickenstein, J. Fernández, R. Miatello
- School on "Geometric Representation Theory" (1 12 August)
 (External School in Bandung, Indonesia. Joint with CIMPA)

In 2012 we have already co-sponsored with CIMPA a school in Lahore; a second one in Dakar is to follow.

Report from GDN:

I have continued relationships with Sub-Saharan Africa in particular with SAMSA (Southern African Mathematical Sciences Association) and I have taken active part at the annual conference, which was held in Zambia, Livingstone, at the end of November 2011. In this occasion, we have had chance of networking, bringing some members of ISP and the CDC to take part to the conference. Some other colleagues from Germany and England have also joined showing interested in supervising students at distance from the various local universities.

Being member of the Norwegian Master Program "Mathematical modelling" funded by NOMA and based in Dar-es-Salam, Tanzania, I have followed the progression of the students and also had the steering committee meeting during the very same SAMSA conference. The program is very successful in terms of students finishing and in terms of gender ratio of participation.

As new activity, I am now involved in CIMPA as Norway has agreed in joining the network as partner. The partnership will be officially formalized this June in Paris during the General Assembly, however the whole year has been spotted by background work between the mathematician involved, the Norwegian Mathematical Society and the Research Council. On another level also the Norwegian Ministry of Research and Education was strongly involved. Within CIMPA, I'm joining Marie-Francoise Roy's discussion group about the development of mathematics in Sub-Saharan Africa.

In June 2011, a student of mine from Tunisia has completed her PhD studies.

Report from Bernd Wegner:

This is to give my final report on the CDC-related ZBMATH activities in 2011, including my own initiatives supporting the book donation programme.

- As in previous years the honorarium donated to the CDC by the ZBMATH-reviewers has been collected at ZBMATH and transferred to the CDC. The precise amount should not be subject of this report, but presumably it will be mentioned in the oral report of the CDC-chair.
- With the approval of the ZBMATH Coordinating Committee the open access offer for the colleagues in DCs is continued in 2012. This offer originally is based on an initiative of the EMS and should acknowledge the participation of EMS in the edition of ZBMATH. The list of institutions and individuals who benefit from this offer can be found in the attachment.

Unfortunately for several of them the initial usage stopped at some point, though there was an annual routine to ask them for updating their access data. Hence I propose that the CDC-members check the list to identify institutions known to them with the aim to generate usage of ZBMATH at these institutions again. I promise to care about the Cuban institutions.

I propose to clean up the list after a period of six months by removing those from the list, which did nor use ZBMATH in 2012 so far.

- I was involved in a book donation initially organized by Josef Teichmann. The donation came from an institute at the TU Vienna. He asked me to care about a safe transport to Cuba. The transport from Vienna to Berlin was financed by the money donated by the ZBMATH reviewers to the CDC. I succeeded to convince the Cuban embassy in Berlin to care about the transport to Havanna. Meanwhile arrival of the books has been confirmed by the colleagues in Havanna.
- I am leaving my office at TU and will donate my book collection located there to the University of Mascara, Algeria. I know a reliable colleague at this university, who will care about the books. My plan is to use the ZBMATH-generated CDC-money for financing the transport of the books. I hope this finds the approval of the CDC.

A report about the future relations between ZBMATH and CDC will be given by my successor, Gert-Martin Greuel. I assume that there will be no changes.

I wish you a successful meeting. I am sorry not to be able to come to Limoges.

Report from MW:

Between the meeting in Madrid in April 2011 and the meeting in Limoges in April 2012, my main activities related with EMS-CDC have been the following ones.

First of all, I have maintained the web site of the European Mathematical Society - Committee for the Developing Countries

http://ems-cdc.org

This website has been renovated by Nick Gill. I am very thankful to him for his superb job.

There is a subsection on the page

http://ems-cdc.org/reports.html

to individual reports, which have a dedicated folder

http://ems-cdc.org/IndividualReports/

I had a number of visits in developing countries, some of them gave rise to reports which are posted on my web site

Coopération Internationale - International Cooperation http://www.math.jussieu.fr/~miw/cooperations.html Several of these visits of mine abroad were done under the auspices of CIMPA (Centre International de Mathématiques Pures et Appliquées), of which I was Regional Scientific Officer until end of 2011 - see the rubric dedicated to the Indian and Western Asia activities

http://www.cimpa-icpam.org/spip.php?rubrique49 (English version)

and

http://www.cimpa-icpam.org/spip.php?article344 (version française)

for the activities in 2011.

- I collected information on Pham Minh Hoang, a French and Vietnamese mathematician, who has been arrested at Hô Chi Minh-City on August 13, 2010. He was sentenced 3 years of prison on August 10, 2011. On November 29, 2011, the sentence was reduced to 17 months of jail and 3 years of house arrest. He came out of jail on January 13, 2012.
- In April 2011, during the <u>Special year in number theory at IMSc</u>, I visited the <u>The Institute of Mathematical Sciences (IMSc</u>), Chennai (India) where I gave a <u>Course on multizeta values</u>.
- In July 2011, I visited the University of Bursa in Turkey and I participated to the <u>The 24th International Conference of Jangjeon Mathematical Society ICJMS'2011</u>, organized by Selcuk University (<u>Department of Mathematics</u>, Science Faculty and <u>Research Center of Applied Mathematics</u>) in Konya. I wrote a report in French.

With the support of <u>CIMPA</u>, Turkey may become a regional center for cooperation with neighboring countries.

- In July 2011, I participated to the <u>CIMPA</u> Research School <u>Systèmes Dynamiques dans des Variétés et Applications</u> in <u>Kinshasa</u>, République Démocratique du Congo (RDC). With Jorge Jimenez Urroz (now the <u>CIMPA</u> Scientific Regional Officer since January 2012) we presented the atelier sur l'<u>Accès internet à la documentation électronique en mathématique en Afrique</u>, which is a French translation of the workshop <u>Finding Online Information in Mathematics</u> of Anders Wändahl. I wrote a <u>report in French</u>.
- In September 2011, I gave a *Master Course: Introduction to Algebraic Number Theory* in Central Department of Mathematics, Tribhuvan University TU, Kirtipur, Kathmandu, Nepal.
- In October 2011, I gave a <u>Course on Finite Fields</u> in the <u>Abdus Salam School of Mathematical Sciences (ASSMS)</u>, Lahore, Pakistan. The workshop on *Number Theory and Allied Areas in Mathematics*, which was supposed to take place in Skardu, was moved to Lahore one week before the start of the course. The <u>Abdus Salam School of Mathematical Sciences</u> is the first selected <u>Emerging Regional Centres of Excellence (ERCE)</u> of EMS.
- In November December 2011, I visited India. I spent one week in Neemrana University (Rajasthan), National Institute of Information and Technology (NIIT), and then three weeks in Harish-Chandra Research Institute (HRI), Allahabad under the HRI "Special Years in Mathematics" Project. I gave a series of courses on Diophantine Approximation and Diophantine Equations. Then I participated to the HRI: International Meeting on Number Theory 2011.
- In January 2012, I visited Thailand. I gave a Course on number theory in Khonkaen University (KKU),

 Faculty of Science, Department of Mathematics.

 On January 23, 2012, I went to Vientiane (Laos) where I visited the Faculty of Science, National University of Laos (NUOL) Lao PDR. I wrote a report in English on my visit to Laos.

 Early February 2012, I also visited in Bangkok (Thailand) the Centre of Excellence in Mathematics (CEM), Department of Mathematics, Mahidol University, and a few days later Chulalongkorn University, Faculty of Science, Department of Mathematics and Computer Science

 After my visits to Thailand (Khon Kaen and Bangkok), I wrote a report in English.
- In February 2012, I visited again the <u>Abdus Salam School of Mathematical Sciences (ASSMS)</u> in Lahore (Pakistan), where I was the <u>CIMPA</u> representative for the <u>Research School : Local analytic geometry</u>. I also visited the <u>Centre for Advanced Studies in Mathematics (CASM)</u>, <u>Lahore University of Managment Sciences (LUMS)</u>
 After this visit of mine to Pakistan, I wrote a report in English.
- In March-April 2012, with Fidel Nemenzo, we deliver a Course on Number Theory in the Master of Science in Mathematics of the CIMPA Master Training Program, Royal University of Phnom Penh (URPP Université Royale de Phnom Penh) in Cambodia.
 Report in English.

Among my projects for next year, I wish to mention the following items.

- I plan to participate to the <u>Joint congress of the French Mathematical Society (SMF) and the Vietnamese Mathematical Society (VMS)</u>, August 20-24, 2012, in Hué (Vietnam)
- M In October 2012, I plan to visit Stat-Math Unit, Indian Statistical Institute(ISI), New-Delhi (India).
- From mid October to end of November 2012, I plan to give a course on Number Theory in Central Department of Mathematics, Tribhuvan University TU, Kirtipur, Kathmandu, Nepal.
- In January or February 2013, I plan to organize a *Workshop on number theory and dynamical systems* in the <u>The Kerala School of Mathematics (KSoM)</u>, Calicut = Kozhikode (Kerala, India).
- In March 2013, I plan to visit again the <u>Abdus Salam School of Mathematical Sciences (ASSMS)</u> Lahore (Pakistan), and to participate to the 6th World Conference on 21st Century Mathematics 2013 (March 6-9).

MW suggested (and it was approved) that the CDC requests the Executive Council of EMS to write to the Ministry of Education and Research of Kurdistan Irak supporting a project of School of Mathematics submitted by the University Salahaddine.

GMG report about Zentralblatt activities:

Zentralblatt has presently an unfavourable economic situation, especially compared with MathSciNet. The possibility to access three hits for free when searching without a subscription has been misused.

Future activities

- Questionnaire to users asking for future expectations and suggestions
- Improve author identification
- Continuous support for developing countries
- If anyone knows of persons that may benefit, please give names.
- The search interface will be improved (again)

MW and MJ report about EMS-ERCE:

Asia:

MW: Can't see an obvious new ERCE in Asia right now. Possibly could Harish-Chandra Research Institute (HRI) in Allahabad, India be considered? MW will explore this possibility.

LA: Thailand Research Fund (TRF) gives good possibilities for Cambodians to get a master or PhD in Thailand. There is no coordinator for mathematics in Thailand for the time being, though.

MJ: Royal University of Phnom Penh does not provide funding for master level education. No salaries for the involved teachers. EMS could write a letter to MOEYS and ask for a change, i.e. the government should take the responsibility. MJ and MW will do that.

Africa:

MRF: Cameroon, Benin or Senegal? IMSP in Benin could be a candidate.

MW: Wait and see. We postpone until next year.

GDN: We must present the conditions visibly and make it clear what we expect from an institution that eventually will receive the ERCE label.

AG: What's the use of this ranking of institutions?

TST: A stepping stone! A kind of recognition for what they do in their local seting. We are prepared to fund them.

Middle East:

Iran is impossible right now!. Turkey? Possibly. No obvious candidates

Latin America:

TST: Maybe countries in this region are too advanced.. they don't need the label.

BVV: Costa Rica and Mexico receiving lots of students from neighbouring countries.

MJ: Good idea to contact UMALCA (Unión Matemática de America Latina y el Caribe) for suggestions and ideas!

GND report about the Twinning programmes:

The Twinning programmes have not been successful. Maybe time to scrap the idea.

(9) Collaborations (actual and possible)

CIMPA

TST: Report from CIMPA. New members are Spain, Switzerland and Norway. A MoU has been signed with AIMS as well as additional agreements with Argentina, Mexico, India.

MFR: CIMPA actvities in sub-saharan Africa: more and more research schools: 2013 will see 20 schools. Low level of participation by women. Will perform a series of workshops about women in mathematics. Support for master programmes in African countries EUR 3000 = one visiting professor or one student coming. Collaboration with AIMS.

IMU

AW: Will attend a workshop in Washington DC (arranged by CEIC and IMU) called "The Future World Heritage Digital Mathematics Library: Plans and Prospects". Need input from EMS-CDC members especially for the so called "position statement" where all participants are supposed to declare their position prior to the conference. See http://ada00.math.uni-bielefeld.de/dml/

PACM

PV: PACM is the brainchild of Mohammed El Tom and the late Mikael Passare. Will be situated in Dar es Salaam. Looking for a rector, suggestions welcome. Curriculum for a master program in preparation, and will eventually be PhD. 40 students from Africa will have full scholarship and receive a Stockholm University master degree. 30-40% funding from Sida, the rest from elsewhere. Planned start January 2015.

Simons Foundation

MFR: is part of the committee for Africa Mathematics Project that launched the call. 35 applications for 5 grants where received. Each grant is 80.000 USD /year for five years.

(10) Request for funding (MW), already circulated.

There has been a request for funding for three Cambodian students traveling to India. The amount required is in total 3450 USD.

The request was approved.

(11) AOB

Next meeting will be 12-13 April 2013 at Linköping University, Sweden.

End of meeting at 1805