Minutes of IAGA WG I.2 Business Meeting of 20th September 2010

Cataracts Pyramid Resort, Giza, Egypt 20 September 2010, 11:40 – 13:00

Attendance: Y. Ogawa (chair), more than 145 WG members (names available)

1. MTNET

The chair thanked A. Jones at the Dublin Institute for Advanced Studies for his continued management of the MTNET web page and Facebook pages. A. Jones reminded the WG that MTNET was there for the EM community to use.

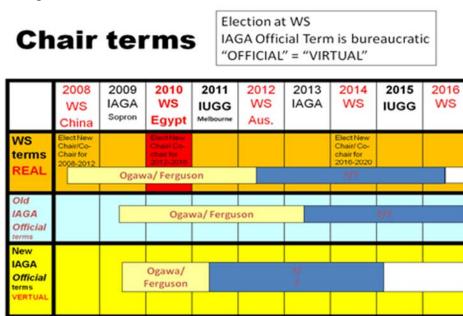
2. Working Group Committee Membership

(a) South American representative. The chair noted that C. Sainato's term as a member of the WGC had ended and that the WGC had nominated S. Fontes as the replacement. The chair asked for additional nominations but there were none. S. Fontes was elected to the Working Group Committee by acclamation.

(b) Central Europe representative. The chair noted that V. Semenov's term as a member of the WGC had ended and that the WGC had nominated S. Kováčiková as a replacement. The chair asked for additional nominations but there were none. S. Kováčiková was elected to the Working Group Committee by acclamation.

S. Fontes and S. Kováčiková thanked the WG for its support.

(c) Next WG chair. The chair explained the new timing for the election of the WG chair and cochair that was adopted at the Sopron IAGA meeting in order to conform to the requirements of both the WG and IAGA (see diagram below). The new chair and co-chair are elected at the EMIW in the year preceding each IUGG, they become the official IAGA representatives at IUGG, and they assume their roles in the WG at the EMIW in the year following the IUGG meeting.



Under this arrangement it is necessary to elect the next chair and co-chair at the present workshop. The chair explained that it is usual practice that the present co-chair becomes the next chair but that the WG has the opportunity to make alternative nominations. No nominations were made. Therefore I. Ferguson was therefore elected by acclamation as the next chair. I Ferguson thanked the WG.

(d) Next WG co-chair. The chair noted that the WGC had nominated N. Palshin as the next cochair. N. Palshin was asked if he agreed and he indicated that he did. The chair asked for additional nominations but there were none. N. Palshin was therefore elected by acclamation as the next WG co-chair. N. Palshin thanked the WG.

2. Financial Support Committee and LOC Report

(a) Financial Report

The WG Treasurer U. Weckman presented the Treasurer's Report (attached). The main function of the Treasurer was to chair the Financial Support Committee and the structure of this committee was described. U. Weckman then summarized the work of the FSC.

• A total of \$USD40,500 was available for support thanks to the fund-raising work of G. Egbert, G. Jiracek, and G. El Qady. U. Weckman listed the organizational and company sponsors.

• The total funds requested by applicants was \$USD131,105 more than three times the available funding. The breakdown of applications between students, postdoc/junior scientists, and senior scientists/retired scientists was presented.

• U. Weckman then described the allocation criteria and process that were applied.

• A total of 49 people were supported under these criteria and the breakdown between students, junior scientists, and senior scientists was presented. A total of 38 students received \$29,100 and 11 postdocs/junior scientists received \$9,560 from a total allocation of \$38,660 from the available funds.

(b) LOC Report

The LOC co-chair G. El Qady presented a brief report from the LOC.

3. Proposal for 22nd EMIW

O. Ritter presented a proposal from the German EMI community to hold the 22^{nd} EMIW at Weimar, Germany (attached). There was only one proposal to hold this workshop. The chair requested feedback from the WG and the proposal was accepted.

Some general discussion about aspects of the EMIW ensued. Points that were raised included:

• The EMIW used to be a full five days but in recent workshops had been reduced to 4 ¹/₂ days.

• Considering the number of submissions the Regional Studies area was under-represented by the length of its session.

- There should be more effort to ensure that the review papers were completed ahead of the workshop with a written version available to the WG at the workshop.
- There should be consideration given to making the discussion sessions more inclusive to include the views of students etc.
- Discussion sessions could include the answering of questions submitted to the session chairs or conveners.
- It would be good if there was some flexibility in presentation timing to allow some discussion after reviews and talks that generated questions.
- It would be good if hard copies of abstracts were available prior to the meeting.

• It would be effective to have the chairs review the posters (either prior to the poster session or in the discussion section).

4. Other Business

None

<u>Treasurer's Report : Electromagnetic Induction in the Earth Working Group</u> 20th International Workshop at Giza, Egypt

A. WG Bank Account

The function of the Electromagnetic Induction Working Group (WG) bank account in Germany (Dresdner Bank, IBAN: DE29100800000368737501, SWIFT: DRESDEFF100, now Commerzbank) is to retain funds of the Working Group between workshops and to facilitate the transfer of funds between funding agencies and the LOC.

In April 2009 an amount of \$3900 was transferred from the Beijing LOC to the WG account as return payment for funded financial support applicants who did not attend the workshop. After bank charges 2963 € was deposited into the WG account.

The WG account balance in May 2010 was $2955 \in (\$ 3756)$. This balance decreases occasionally at a maximum of 5 \notin /month due to bank service and postal charges. Once every three month I can claim most of these charges back, as Dresdner Bank wants to support science.

In July \$1500 from IUGG and $500 \in$ from Metronix and in August \$1500 from IAGA were transferred to the WG account. This was followed by \$990 from the Hohmann Memorial Trust in September 2010. In September 2010 \$7150 were transferred to Co-Chair of LOC to make sure that enough cash is available at the WS for paying the applicants' funds.

The WG account balance on 15^{th} September 2010 was 1766.94 \in . This amount was used for paying applicants from the \in -zone directly.

B. Summary report on Beijing EMI Workshop

A report on the Beijing EMI workshop was prepared as a requirement of some funding agencies The report, containing information on the statistics of the workshop, was prepared for IAGA and MTNet and provided to both in August 2009. Ian Ferguson, George Jiracek, Yasuo Ogawa, Zhao Guoze with helpful input from several others were involved. An additional report for SEG's "The leading edge" was discussed among the working group in November 2009. An announcement for the Giza workshop was placed in the "Leading Edge" issue July 2010 by George Jiracek.

C. Giza EMI Workshop Financial Support Committee

This section of the Treasurer's report concerns the Giza EMI Financial Support Committee's work and is presented on behalf of the Committee.

<u>1. Committee Structure</u>

For the Giza EMI workshop the Financial Support Committee comprised:

- Ute Weckmann, WG Treasurer (FSC Chair)
- Gary Egbert, WG Fund Raising Coordinator
- Yasuo Ogawa, WG Chair
- Ian Ferguson, WG Co-Chair
- Gad El-Qady, LOC representative
- Graham Heinson, Next workshop chair
- Chen Xiaobin, Representative from previous LOC
- Esmat Abdelaal, Treasurer from LOC (non-voting member of FSC)
- George Jiracek, Advisor from WG observer (non-voting member of FSC)

The committee commenced its work in early June 2010.

2. Application Procedure

The web application form for Financial Support for the workshop was developed by the LOC, based on former EMI form. The form provided all of the information necessary to the committee and there were only a small number of problems resulting from applicants being uncertain as to the meaning of questions. At a later stage copies of the online applications were provided to the WG treasurer. Several delays occurred because of issues of communication between the LOC and the rest of the FSC. Applications closed on June 4th 2010.

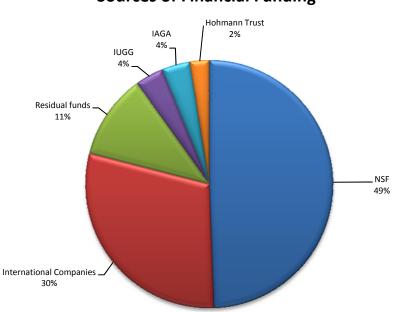
3. Sources of Financial Support Funding

The Giza EMI Financial Support Committee had an amount of \$USD40,500 to distribute. Table 1 and Figure 1 show the sources of the funding for Financial Support for the workshop. The largest source of the funding was the USA National Science Foundation (NSF). The continued NSF support for the EMI Workshops is extremely valuable. However, for allocation of funds the FSC was asked to meet the condition that at least half of the funds support US applicants. Additional large contributions to the Financial Support funds for the workshop came from international/national companies, and from IAGA and IUGG. The Financial Support Committee is very grateful for each and every one of these contributions as even the smaller contributions coming from some companies enable one or two additional people to attend the meeting.

| | Source | Amount (USD) | Percentage |
|---|---------------------------------|--------------|------------|
| 1 | USA National Science Foundation | \$20,000 | 49.4% |
| 2 | International companies | \$12,000 | 29.6% |
| 3 | Residual funds | \$4,500 | 11.1% |
| 4 | IUGG | \$1,500 | 3.7% |
| 5 | IAGA | \$1,500 | 3.7% |
| 6 | Hohmann Trust | \$1,000 | 2.5% |
| | Total | \$40,500 | |

Table 1. Sources of Funds for Financial Support

Figure 1. Sources of Financial Support Funding for Giza EM Induction Workshop.



Sources of Financial Funding

Note that а number of agencies, companies, and organizations have contributed other to aspects of the workshop and that these represent contributions indirect financial support the participants. for Table 2 lists companies and organizations that have contributed to the workshop. The logos of the organizations appear at the end of this report. A brief summary of the financial support, listing

the companies and organizations who have contributed to financial support, has been prepared for the MTNET web pages. George Jiracek's and Gary Egbert's contribution to the fund raising effort should be recognized as their efforts resulted in the largest component of the funds. They received considerable assistance from Gad El-Qady, and others.

Table 2. Sponsoring Organizations for 20th International EMI Workshop

| Companies | | | | | |
|-----------|---|--|--|--|--|
| 1 | Phoenix Geophysics Ltd. Canada | | | | |
| 2 | KMS Technologies - KJT Enterprises Inc | | | | |
| 3 | Metronix | | | | |
| 4 | Schlumberger EMI Technology Center | | | | |
| 5 | Geometrics | | | | |
| 6 | Zonge Engineering and Research Organization, Inc. | | | | |
| 7 | Geonics (not yet transferred) | | | | |
| 8 | IGSE | | | | |
| | | | | | |
| Orga | Organizations /Institutions | | | | |
| 1 | USA National Science Foundation (NSF) | | | | |
| 2 | International Association of Geomagnetism and Aeronomy (IAGA) | | | | |
| 3 | International Union of Geodesy and Geophysics (IUGG) | | | | |
| 4 | Hohmann Memorial Trust | | | | |

4. Applications Received

For this workshop we received applications from a total of 90 applicants and the total request for funds is \$USD131,105. This compares with 146 applicants for \$USD181,307 at the last workshop. On average the amount requested is around \$USD1,457 per applicant, approximately 50% more than for the previous workshop. We received applications for Financial Support from: 61 students, 17 postdocs or junior scientists (within 6 years of their previous degree), and 12 senior and retired scientists (Table 3, Figure 2). Some of these applicants withdrew their application or declined the funding granted, for example, because they received alternate funds or were unable to attend the meeting.

Table 3. Summary of applications

| Category | Number of applicants | Amount requested (USD) |
|-----------------|----------------------|------------------------|
| Students | 61 | \$91,770 |
| Postdocs/Junior | 17 | \$27,975 |
| Scientists | 8 | \$7,910 |
| Retired | 4 | \$3,450 |
| Total | 90 | \$131,105 |

Figure 2. Applications for financial support to attend Giza EM Workshop.

5. Allocation Process for Financial Support

The requested funding support exceeded the available funds by a factor of more than three. The funding decisions were again very difficult and it was impossible to fund all requests. For the initial round of funding the committee had \$USD34,000 available for allocation and subsequently another \$USD6,500 became available for a second round of allocations. Unfortunately, we did only receive a few applications from African colleagues and students.

The initial funding allocations were made using the following criteria:

1. No late applications were considered.

2. Only those applicants who were authors of presentations (poster or oral) could be supported.

3. Funding could not be provided for those applicants who received significant funding for previous workshops. Exception: Registration waiver for African applicants.

4. Funding was limited to an average of 63% of the requested/required amount. General limits were also applied for different geographical areas to ensure equity. In some cases the difference of requested amount of funding to required fund was excessive. It seemed that some of the applicants just filled out the application form without checking what they actually need.

5. Subsistence funding set at a maximum of \$USD210 for all applicants and registration was set at the early-registration amounts of \$USD200 for international students, 350LE for Egyptian students, \$USD350 for other international delegates and 700LE for other Egyptian delegates.

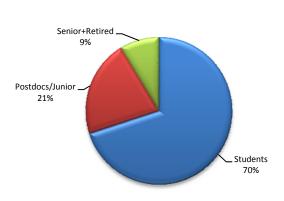
6. Funding was limited to one person from each category (student/postdoc/senior) per institution. Similar to previous workshops we allowed applicants from one institution to decide who will get which amount of the totally available funds for this institute.

With these guidelines the amount required exceeded the \$USD34,000 available for the first round of allocations. The committee had to introduce additional criteria:

7. Only students and postdocs could be funded, which means no funds for retired applicants or full professors

The results of this round of allocations were announced to the applicants on the 3rd and 5th July 2010.

A second round of allocations became possible as a result of the availability of additional financial support and because one applicant from the initial round had declined his funding. These funds were allocated in a manner designed to help as many people as possible and consisted of allocations to: registration fee waiver for African applicants; small additional top-up support to some



Support Requests

applicants who only received a small amount of funds initially and were able to acquire additional national funding, which was in total not sufficient to attend the workshop. Results of this round of allocations were announced to the applicants on 5th August 2010.

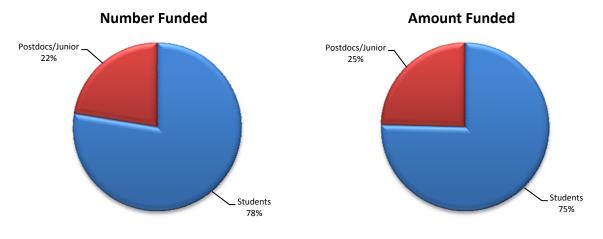
As a result of several applicants declining funding, and in consideration of uncertainty in exchange rates, arrival of funds, and unforeseen issues, not quite all of the available funding was allocated. As of 15th September 2010 a total of \$USD38,660 was allocated. Remaining funds will be carried forward for use in funding support at the 21st

EMI workshop in Australia in 2012.

The funding allocation decisions were made by the committee as a whole and involved many email messages. The decisions were difficult and several points regarding the decisions should be made. Firstly, the committee acknowledge that there are many people, particularly, senior scientists who deserve funding but it is just unable to support them. Secondly, the funding is biased towards students and junior scientists in order to be consistent with the nature of the NSF funding that is received. Thirdly, the committee is not in an appropriate position to assess the true needs of the applicants and it considers the information provided on the applications at face value. Finally, funds are distributed in a broad manner so as to maximize the opportunity for involvement in an EMI workshop by as many countries, institutions, groups and individuals as possible. The committee is not in an appropriate position to judge the scientific merit of individual EM researchers, individual groups or individual EM institutions. For this workshop the close of applications was postponed several times as the date was not clearly communicated on the web page. Decisions were made and communicated to the applicants within a month's time. Because of uncertainty about the levels of available funding we were not sure if the full amount could be paid and informed the applicants that they might get \$US 75 less than originally announced. The delay (after early registration deadline) was accommodated by extending the early registration period for the financial support applicants.

6. Distribution of Financial Support

The distribution of funds to the different groups (as at 15th September 2010) is shown in Table 4 and Figure 3. A total of 49 people will receive some funding, although many of these are receiving a relatively modest amount. The average amount provided to individuals in all groups (comprising the



students, the postdocs, and scientists) is \$USD789. Funding is being provided to applicants from 20 different countries.

| Category | Number of applicants | Amount funded (USD) |
|-----------------|----------------------|---------------------|
| Students | 38 | \$29,100 |
| Postdocs/Junior | 11 | \$9560 |
| Total | 49 | \$38,660 |

Figure 3. Recipients of funding for Giza EM Workshop (as of 15th September 2010).

7. Provision of Financial Support

The allocated funding was provided to the applicants in two ways. The applicants could use the funding to pay their registration directly. Initially the Financial Support Committee had hoped that this option would also be applicable for the accommodation fees. However, most of the applicants could only make a reservation for a room if they pay LOC directly. This option of paying the applicants' fees directly to LOC reduces the amount of cash that needs to be handled during the registration procedure

and helps minimize costs associated with multiple currency exchanges. The remaining funds were provided to applicants in the form of cash or cheques at the workshop registration or by bank transfer. Except for extreme situations, funding is not provided ahead of the workshop.

As of end of August 2010 it was still unclear how the funds can be transferred to LOC in time. Communication problems and misunderstanding between LOC and FSC resulted in missing deadlines for successful bank transfers to Egypt. Applicants from the Euro zone were offered a direct bank transfer after the workshop, as similar scheme using OSU cheques was applied to the North-American successful applicants.

8. Recommendations Concerning Financial Support at Future Workshops

The following are some recommendations for future Financial Support Committee operations from the perspective of the chair of the committee and are essentially the same as for the previous workshops.

1. The WG continues to work hard on raising funds for financial support from government, industry, and other agencies.

2. Establish and approve structure and membership of the Financial Support Committee at the preceding workshop.

3. Confirm as much funding as possible, as early as possible, in order to allow the announcement of Financial Support results well prior to the workshop. If the data of the announcement is after the end of the early registration period permit the Financial support applicants to pay at early registration rates.

4. Determine the Financial Support requirements for reviewers at an early date in order that the Financial Support Committee can include this information in its decisions.

5. The format of the application form for Financial Support for the workshop was very effective.

6. Establish the optimal procedures for distributing the funds as early as possible in the committee deliberations (*i.e.* the optimal choice or combination of local currency, local currency cheques, US dollars, US dollar cheques, US dollar travellers cheques, and/or contribution to registration fees).

7. Applications for IUGG support for conference have to be submitted before 31 October the year before the workshop and to be submitted through the constituent associations. Therefore an application for IUGG support for the next EMI workshop should be submitted through IAGA by end of September 2011 (or by any revision of the IUGG deadline).

8. The WG may wish to again consider using/declining the IAGA funding that is made available for a Young Scientist Award for the best paper presented by a young scientist attending an IAGA-sponsored topical meeting for attendance at the next Assembly.

10th September 2010

Ute Weckmann Treasurer, WG I.2, IAGA, Chair, WG I.2 Financial Support Committee

The 20th International Electromagnetic Induction Workshop, Giza 2010, is sponsored by:















Proposal to host the 22nd International EM Induction Workshop 2014 in Germany

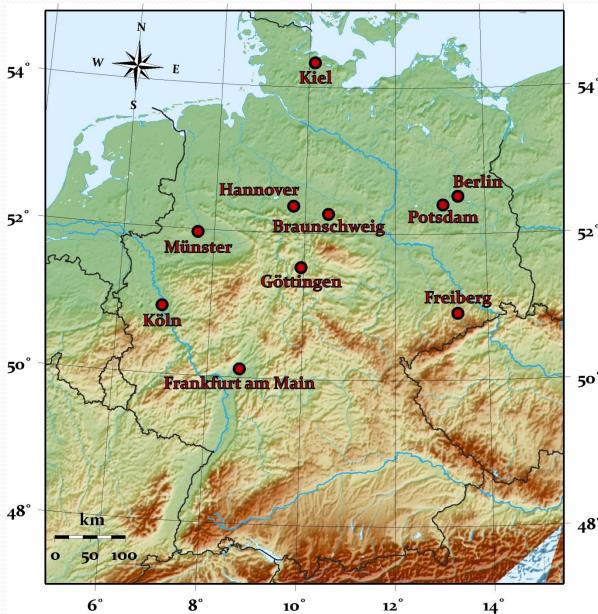
Oliver Ritter

- A proposal must come from the whole EM induction community in one country ...
- The Working Group Committee accepts proposals from countries who have previously hosted an EMIW, particularly those countries that hosted the earlier workshops.

Germany is in Europe



German EM community



54° FU Berlin

- TU Braunschweig
- **U** Frankfurt
- TU Freiberg
- Geomar Kiel
- U Göttingen
- Geozentrum Hannover (BGR, LIAG) 50°
 - U Köln

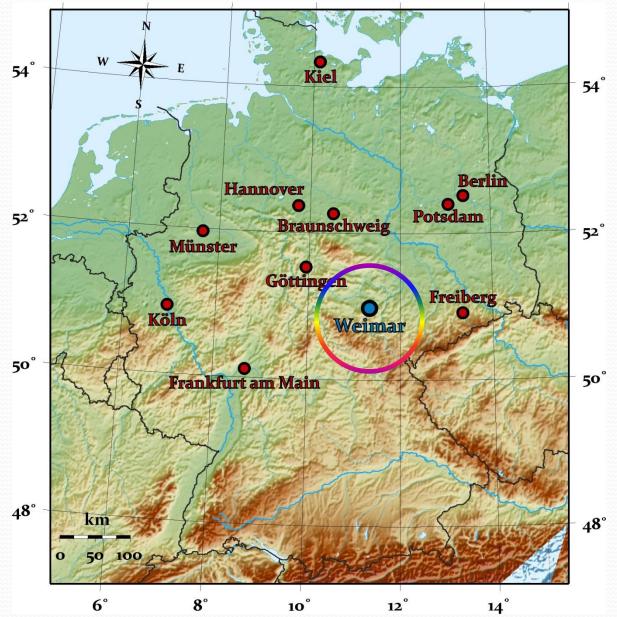
48°

- U Münster
- **GFZ Potsdam**

Germany hosted the 4th Workshop in Murnau, 1978.

 We prefer to hold the workshops in small communities, in order to have a workshop atmosphere that promotes interaction between all participants (scientists and students) outside the formally scheduled events.

Weimar 2014



Some facts about Weimar

- Located in central Germany in the state of Thuringia.
- Approximately 65000 inhabitants.
- Congress Centre (neue Weimarhalle).
- Good travel connections.
- Culture: UNESCO World Heritage Site.
- Interesting excursion destinations.
- Many local specialties.



• Internal transportation from nearest international airport, including estimate of cost



How to get there?

- Nearest international airports: Frankfurt (2:45 h), Leipzig (1:40 h), Berlin (2:20 h).
- Fast trains go directly from Frankfurt airport to Weimar
- trains leave every hour during day time
- Return ticket costs approximately 100 Euro



- Size of **conference room**
- Size of poster room (All the posters should be up throughout the workshop)
- Space for commercial exhibits from sponsoring companies
- Information on the proximity of venues and the accommodations



Venue – front view



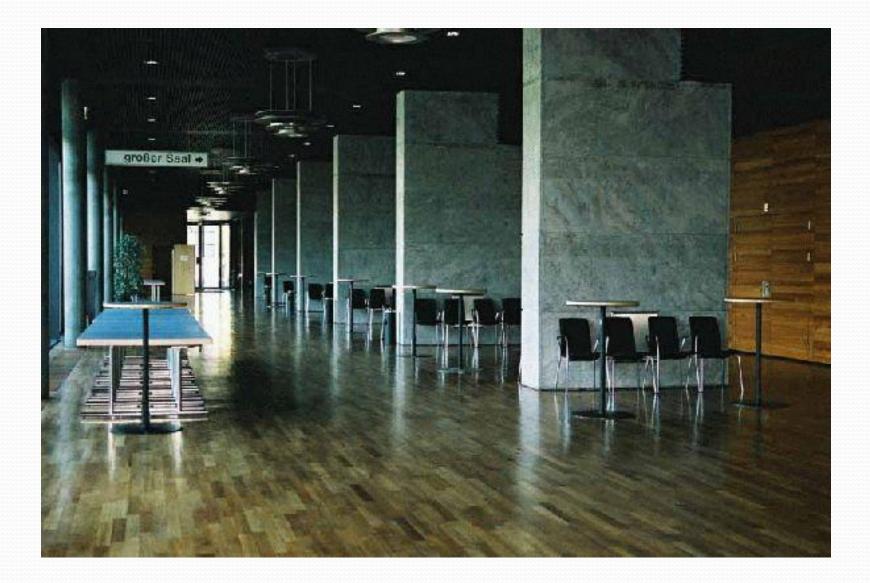
Venue – back view



Venue - lecture theatre







Neue Weimarhalle

- Main lecture theatre: up to 1000 people, beamer with 12.000 lumen, 8x6m screen, professional sound
- Two foyers and lobby big enough for all posters, commercial exhibits, and for coffee breaks.
- Catering service available (could be used for the conference dinner)





Excursion

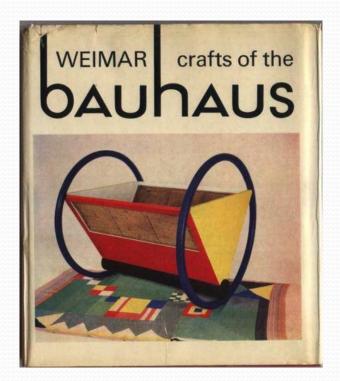
History of Weimar

- The oldest record of the city dates from the year **899**.
- Regencies of Anna Amalia (1758–1775) and her son Carl August (1809– 1828), Weimar became an important cultural centre of Europe:
 - Home to Goethe, Schiller, Herder, Liszt, and Bach.
 - A site of pilgrimage for the German intelligentsia.



History of Weimar

- The period from **1919 to 1933** is referred to as the Weimar Republic, as the Republic's constitution was drafted here.
- Walter Gropius founded the Bauhaus School and movement in Weimar in **1919**.



History of Weimar

- In 1937, the Nazis constructed the Buchenwald concentration camp, only eight kilometers from Weimar's city center. From 1945 to 1950, the Soviet Union used the camp to imprison defeated Nazis and other Germans.
- From **1949 to 1990**Weimar was part of the German Democratic Republic
- Many places to visit: Goethehaus, Bauhaus Universität, Anna Amalia Bibliothek, Buchenwald



Wartburg



Approximately 90 km east of Weimar (1 hour driving)

A medieval castle near the city of Eisenach. It was built in 1067 on rock 220 m above Eisenach.



Erfurt



Approximately 25 km east of Weimar

Capital city of Thuringia. First mentioned in 742, Erfurt has preserved an intact medieval city

centre.



 Most of the previous workshops have been in July and August but the proposed dates are at the organizer's discretion. The dates should not conflict with other major meetings.

Suggested time frame

August 2014: Sunday 24th to Saturday 30th

- Climate in August:
 - Avg. 16°C
 - Avg. high: 21° C
 - Avg. days of rain: 6



 Affordable registration and accommodation fees should be developed so as to allow significant participation by students and scientists from developing countries.

Registration fees

• Average: 300-350 €, Full: ~400 €, Reduced: ~250 €

- Fees are estimated based on a quotation for the congress center and the catering company (valid until October 2010).
- Fees include conference venue, coffee, dinner, and excursion.
- Fees are calculated assuming a minimum amount of support.

Accommodation

- Weimar is used to tourists: more than 500,000 overnight stays per year
 - Youth hostels: **15-45** € (500 beds)
 - Privately let rooms: **18 35** € (250 beds)
 - Guest houses: **25 55** €
 - Holiday flats: **30 70 €**
 - Hotels: 40 250 €
 (3.500 beds, 750 first class)
- Prices include breakfast



- List of **LOC** members with affiliations and roles
- Possible local funding
- Statements of support
- Support letters from host organization(s), national colleagues, funding agencies.

Local Organizing Committee

- Preliminary LOC, in alphabetical order: M. Becken, R. Börner, H. Brasse, M. Grinat, T. Hanstein, S. Hölz, A. Hördt, M. Jegen, A. Junge, M. Moorkamp, G. Munoz, O. Ritter, K. Schwalenberg, B. Siemon, K. Spitzer, A. Steuer, R. Streich, B. Tezkan, U. Weckmann.
- Committees for: Conference, Funding, Excursion, Events, Pre-workshop, Post-workshop, Web site, Registration, Accommodation, Scientific program, Industry exhibition, etc.

Pre- / Post- Workshops

- Workshops will be organized by local EM groups.
 Possible topics could be:
 - Near-surface EM, organized jointly by Cologne and Hannover
 - Marine MT/EM interpretation workshop in Kiel
 - Numerical Methods in EM workshop in Freiberg

Local Funding

- DFG (National Science Foundation of Germany)
- DGG (German Geophysical Society)
- Federal Ministry of Education and Research
- State of Thuringia
- Institutional: GFZ, BGR, LIAG, Geomar
- Public trusts: Volkswagenstiftung,
- Industry: KMS, Metronix, ...

International Funding

- IAGA (International Association of Geomagnetism and Aeronomy)
- IUGG (International Union of Geodesy and Geophysics)
- NSF (US National Science Foundation)
- International sponsors from industry.