WEB ENABLING TECHNOLOGIES & STRATEGIES FOR SCIENTIFIC e-LEARNING

7 - 12 November 2005

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FOR SCIENTIFIC e-LEARNING

7 - 12 November 2005, *Trieste, Italy*
http://www.ictp.it/~its

The Abdus Salam International Centre for Theoretical Physics, Trieste, Italy, in co-operation with the Department of Theoretical Physics of the University of Trieste is organizing a follow-up of the previous series of Workshops on *'Web Enabling Technologies'* held at ICTP. The focus of the new 2005 Workshop is a more exclusive reference to *'e-Learning issues and related Open Source technologies'*, emphasizing the transfer of information and up-to-date technologies and solutions from the IT community to the potential content provider in the scientific community.

The Workshop Directors are Dr. E. Canessa and Dr. G. Pastore.

MOTIVATION

The plethora of (less-known) Open Source technologies can offer to the Scientific Community of Developing Countries concrete alternatives to enter the Internet and to share their contents and resources with their peers world-wide. This lack of knowledge indicates the need for the academic environment to be trained in Information and Open Source Web Technologies as well as in the different strategies for scientific e-Learning to optimize its usage and contents.

The motivation of a new Web Enabling Workshop focusing on scientific e-Learning and related issues is to target scientists working in remote areas under low-bandwidth conditions. The means used to write and share scientific knowledge and ideas, with their own unique professional needs, are essential to help reduce scientific isolation. The aim is to guide Scientists to become acquainted with the resources available for this purpose and help to reduce the digital divide.

The growth of the Internet in the Universities in developing countries has to face two problems:

- limited bandwidth of available telecommunication lines, causing line congestion and making access exceedingly slow, often beyond the limits of usability;
- insufficient computer literacy of the academic community, with the consequent insufficient understanding of the potential of the network as a tool for *spreading* information (contrasted with its use for *accessing* information generated elsewhere), promoting collaboration and enhancing knowledge transfer.

Both problems reduce drastically the effectiveness of Internet access as a tool to overcome scientific isolation. Moreover, emphasizing passive access only, with respect to an active diffusion and contents of information as the only purpose of the Internet reduces its usefulness for national development.

PURPOSE

With respect to the previous edition, the focus of the 2005 Workshop will shift to a more exclusive reference to "e-Learning issues and Open Source technologies", and emphasizing the transfer of information about up-to-date technologies and solutions from the IT community to the potential content provider in the scientific community.

This new Workshop aims to train and inform trainers at scientific and academic institutions about the *state-of-the-art* of Web-based technologies for e-Learning, new standards, services and developments specifically tailored to the scientific formation and support at distance using the Internet. The purpose is to allow the workshop participants to act mainly as teachers, but also as consultants, to their national community, colleagues and students.

The Workshop objectives point to familiarize participants with basic and advanced tools to put and search scientific information on a multicultural Web, administration of e-learning CMS selected among those most relevant to the kind of materials that scientists need to distribute (scientific papers & data, courseware ...).

PROGRAMME

The Workshop will consist of:

* *Technicalities:* Web Servers/Software, Statistical Tools and User Tracking, etc.
* *Web Access to Resources:* e-Learning open source packages, databases and related issues.
* *Applications:* Authoring/Page design/Web Site tools, CGI's, Servlets, Collaborative and e-Learning Environments, Chat Rooms/Web Conferencing, Didactic Web Presentations, Scientific e-Publishing. Scientific Web notation like MathML and key technical developments like XML.
* *Cases Studies by Participants.*

Part of the Workshop will consist of laboratory sessions and demos. Linux will be used as primary O.S.

PARTICIPATION

This new Workshop aims to train and inform trainers at scientific and academic institutions about the state-of-the-art of Web-based technologies for e-Learning, new standards, services and developments specifically tailored to the Scientific formation and support at distance using the Internet. The purpose is to allow the workshop participants to act mainly as teachers, but also as consultants, to their national community, colleagues and students.

The Workshop is open to scientists from countries that are members of the UN, UNESCO or IAEA. The main purpose of The Abdus Salam ICTP is to help research workers from developing countries within a framework of international cooperation, a limited number of students and post-doctoral scientists from developed countries are also welcome to attend.The Workshop is also targeted to Decision Makers and Computer Consultants working in isolated scientific environments with a minimal infrastructure.

Only limited funds are available for participants from developing countries who will be selected by the Organizers. May be requested only by candidates who are nationals of, and working in, a developing country, and who are not more than 45 years old. **Every effort should be made by candidates to secure support for their fares (or at least half-fare) from their home country**. It is stressed that participants whose travel expenses are paid by the ICTP are required to attend the entire Workshop. There is no registration fee to be paid . For both technical reasons and limited resources the total attendance to this Workshop is strictly limited to a few participants. As the Workshop will be conducted in English, participants should have an adequate working knowledge of that language.

Deadline for receipt of applications: **1 August 2005**

The **Brief Technical Questionnaire** and **Application Form** to be found at the end of the Bulletin and obtainable also from the ICTP WWW server:
http://cdsagenda5.ictp.trieste.it/full_display.php?ida=a04214
should be completed and returned before **1 August 2005** to:

Web Enabling Technologies & Strategies for Scientific e-Learning
(c/o Ms. S. Tanaskovic - smr1682)
the Abdus Salam International Centre for Theoretical Physics
Strada Costiera 11, 34014 Trieste, Italy.

or

smr1682@ictp.it
(please save and send file attachments in RTF format)

SCHOOL SECRETARIAT   Telephone: +39-040-2249911
                            Telefax: +39-040-224600
                            E-mail: smr1682@ictp.it
              ICTP Home Page: http://www.ictp.it/

BRIEF TECHNICAL QUESTIONNAIRE

Web Enabling Technologies & Strategies for Scientific e-Learning
Miramare - Trieste, Italy
7-12 November 2005

BACKGROUND INFORMATION TECHNICAL SKILLS
The questions below are intended to assess the global experience of the participants.

1.   Are you a Unix/Linux user? If yes, for how long have you used it?

2.   What other operating systems are you familiar with (*e.g.*, MacOS, MS-DOS, ...), and for how long have you been using them?

3.   Do you have experience in <u>USING</u> the following Internet services?
(Please qualify your experience using 0 to 5, 0 means no experience and 5 a lot of expertise)

      [.......] Listserver   [.......] News   [.......] FTP   [.......] Other (specify): _____
      [.......] Web   [.......] E-mail   [......] CMS *–Content Management Systems*

4.   Do you have experience <u>RUNNING</u> Internet services?
(Please qualify your experience using 0 to 5, 0 means no experience and 5 a lot of expertise)
      [.......] Listserver   [.......] News server   [.......] FTP server
      [.......] SQL server   [.......] Web server   [.......] E-mail server

      [.......] Searching/Indexing services   [.......] Caching Server   [.....] CMS
      [.......] Groupware pakages   [......] Web Portals   [.....] Other (specify) _____

5.   A description of your position, your duties and responsibilities, and how they could relate to the Web Enabling Workshop.

6. Give a brief description of your computing and networking environment (operating systems, IT software, *etc.*), including the type of connectivity your organization uses to connect to the Internet.

7.   Scope of your institution (check all categories that apply):
      [ ] Academic   [ ] General Research   [ ] Government
      [ ] Commercial   [ ] Other (Specify) _____

8.   How you expect to use the knowledge you gain at the workshop and after you return to your institution.

Name and Signature of Candidate   Date

_____   _____

UNITED NATIONS EDUCATIONAL SCIENTIFIC AND CULTURAL ORGANIZATION
and
INTERNATIONAL ATOMIC ENERGY AGENCY

THE ABDUS SALAM INTERNATIONAL CENTRE FOR THEORETICAL PHYSICS

P.O. Box 586   Telephone: +39-0402249911
I-34100 Trieste   Telefax: +39-040224600
Italy   e-Mail: smr1682@ictp.it

REQUEST   FOR   PARTICIPATION *)

Workshop on: **Web EnablingTechnologies & Strategies for Scientific e-Learning**
Miramare - Trieste, Italy
7 - 12 November 2005

INSTRUCTIONS

Each question must be answered clearly and completely. Type or print
in ink. If more space is required, attach additional pages. The request
for participation form should be forwarded to:
   The Abdus Salam International Centre for Theoretical Physics
   Web Enabling Technologies & Strategies for Scientific e-Learning
   (c/.o S. Tanaskovic - SMR1682)
   P.O. Box 586, I-34100 Trieste, Italy
                 to arrive before **1 August 2005**

A recent photograph
of the candidate should
be attached here, signed
legibly on reverse.

PERSONAL DATA
NOTE: This request will be processed ONLY if the permanent address (and present address, if different) is clearly
indicated.

            (if applicable)   (**Surname and Names as corresponding to that on passport**)
SURNAME: MAIDEN NAME: First name: Middle name(s):   Sex:

Place of birth (City and Country):   Present nationality: Date of birth
                                                             Day-Month-Year

Full name and address of permanent Institution: Tel. No.:
                                                            Cable:
                                                             Telex:
                                                             Telefax:

E-mail address (clearly and in capitals):

Full name and address of present Institution (if different from permanent):   Tel. No.:
                                                                        Cable:
                                                                        Telex:
                                                                         Telefax:
until: (Day___Month___Year___)
E-mail address (clearly and in capitals):

Home address: Tel. No.:

Mailing address - please indicate whether: Permanent address ❏ or Present address ❏ or Home address ❏

Name and address of person to notify in case of emergency - Relationship:

I agree that my e-mail address(es) may be made public of the ICTP WWW page: yes ☐   no ☐

EDUCATION   (higher degrees)

University or equivalent Name and place	Years attended From to	Degrees

Seminars, summer schools, conferences or research

Name and place	Year

SCIENTIFIC EMPLOYMENT AND ACADEMIC RESPONSIBILITY

Research Institution or University Name and place	Period of duty From to	Academic responsibilities

Present employment and duties and foreseen employment upon return to home country after the activity:

Have you participated in past ICTP activities: Yes ☐   No   ☐
If yes, which?

Kindly supply (strictly within indicated lenghts) a keyword description of your current scientific activities as follows:

1)   **Area of research:** (e.g. Physics, Computing,...
|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|
|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__| (*no more than 50 characters*)

2)   **Specified topic of interest** (e.g. Information Technology, Computer Networking, ...):
|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|
|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__| (*no more than 50 characters*)

All participants are invited to present a case study on the **Workshop Topics.**
Please give title and summary:

List any relevant publications including books and articles (authors, title, journal) in the period 2000-2005:

Kindly state any positions you hold in the scientific administration of your Institution or any of the national scientific Institutions.

If appropriate, it would be of assistance to the Selection Committee if this request for participation were accompanied by a letter of recommendation.

Indicate below your proficiency in the English language

Reading:	Good ❑	Writing:	Good ❑	Speaking:	Good ❑
	Average ❑		Average ❑		Average ❑
	Poor ❑		Poor ❑		Poor ❑

APPLICABLE ONLY FOR CANDIDATES FROM DEVELOPING COUNTRIES (**Important**: Please note that **very few** travel grants are available, and preference in selecting participants will be given to eligible candidates who can guarantee travel coverage by own local sources).

> **Please tick as appropriate:**
>
> - I can definitely find **complete** travel funds from local sources ❑
> or
> - I can definitely find **half** my travel funds from local sources ❑

I am requesting financial support from the ICTP for:

> - **Half** travel ❑   - **Full** travel ❑   - Living allowance ❑

I am **NOT** requesting financial support from the ICTP ❑

I certify that if granted funds for my travel I will attend the whole activity

Signature ....

I certify that the statements made by me above are true and complete. If accepted, I undertake to refrain from engaging in any political or other activities which would reflect unfavourably on the international status of the Centre. I understand that any breach of this undertaking may result in the termination of the arrangements relating to my visit at the Centre.

_____   _____
Signature of candidate   Date