II Workshop on

WEB ENABLING TECHNOLOGIES FOR SCIENTISTS Trieste, 11-20 November 2002

The Abdus Salam International Centre for Theoretical Physics, Trieste, Italy, in cooperation with the Department of Theoretical Physics of the University of Trieste is organizing a second Workshop on "Web Enabling Technologies for Scientists" to be held from 11-20 November 2002. Directors of the Workshop are Dr. Enrique Canessa and Dr. Giorgio Pastore.

Motivation

The diffusion of the Internet in the Universities in developing countries has to face two major 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.

The motivation for this new Workshop is the high costs for academic institutions to get a well focused, high-level, technical training on Web Enabling Technologies. It offers an opportunity to discuss directly with experts and developers and to satisfy the increasing need for an updated transfer of know-how from the Information Technology world to the scientific communities.

The means used to write and share scientific knowledge and ideas, with their own unique professional needs, are essential to help reduce scientific isolation and bridge the digital divide.

Purpose

The focus of this second Web Enabling Workshop is pointed towards a more exclusive reference to "support usage", and the transfer of information on up-to-date technologies and solutions from the IT community to the potential users of these tools, in the scientific community.

The Workshop objectives point to familiarize participants with the most advanced techniques for optimizing the use of bandwidth; to become familiar with basic and advanced tools to put and search scientific information on a multicultural Web, selected among those most relevant to the kind of materials that scientists need to distribute (scientific papers, scientific data, courseware ...).

Programme

The Workshop will consist of:

1 Technicalities:

Databases and related issues, scientific data mining etc.

3. Applications:

Authoring/Page design/Web Site tools, CGI's, Servlets, Collaborative and Learning Environments/Chat Rooms/WebConferencing, Didactic Web Presentations, Scientific Electronic Publishing. Scientific Web notation like MathML and key technical developments like XML.

4. 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 andacademic institutions about the state-of-the-art of Web-basedtechnologies, new standards, services and developments specificallytailored to diffusion of Scientific Contents and the transfer of scientific data using the Internet. The purpose is to allow them to act mainly as teachers, but also as consultants, to their national community, colleagues and students.

The Workshop is also targeted to Decision Makers and Computer Consultants working in isolated scientific environments with a minimal infrastructure on Information and Communication Technologies.

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.

Only limited funds are available for participants from developing countries who will be selected by the Organizers. 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 School. There is no registration fee for attending the Workshop.

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 requesting participation is 31 July 2002.

Candidates should complete and sign the request for participation form to be available in the near future (*)

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