Parallel Session 16: Are Internet expectations being accomplished?

THE INTERACTION COLLABORATION

THE ROLE OF THE WORLD WIDE WEB IN GLOBAL PHYSICS COMMUNICATION

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Abstract

The science of particle physics requires international collaboration, because of the scale and cost of particle accelerators and experiments. Global collaboration promotes cooperation and understanding among scientists from all parts of the world. Recent world events have strained the traditional collaborative relationships of international particle physics. Particularly in the United States, issues of visas, access to national laboratories, and travel restrictions create barriers to scientific collaboration. The InterAction Collaboration of particle physics communicators was founded as a countervailing force to these strains on the international particle physics community. Its Web site, www.interactions.org, is critical to the collaboration's effectiveness.

Key words: collaborative physics communication

Text

Context: A Global Science

The science of particle physics today is a worldwide collaborative endeavor. The scale of the particle accelerators and detectors required for research in this field dictates a degree of international cooperation that is perhaps greater than in any other field of research. Experiments at a handful of high-energy particle accelerator laboratories in Europe, Asia and the United States bring together men and women of science from nearly every country of the globe to carry out research on the fundamental nature of matter, energy, space and time. Born of necessity, these collaborations offer an inspiring model for the free exchange of scientific information. Moreover, the discoveries of the future will require still greater cooperation among laboratories, among nations and across the fields of physics.

At the same time, recent world events have begun to strain the traditional collaborative relationships of international physics. Issues of visas, travel restrictions and access to national laboratories by foreign nationals have created barriers to international collaboration and raised doubts about the feasibility of future large-scale international projects.

Objective: A New Model of Physics Communication

In the field of particle physics, most communication resources are concentrated at the large national or international laboratories. The laboratories have the missions, the dedicated budgets and the professional expertise required for sustained communication with key audiences. Traditionally, each laboratory and communicated independently of the others, with little coordination and frequently at cross purposes.

The InterAction collaboration was founded in 2001 (Jackson, 2003) by particle physics communicators from six particle physics laboratories in Europe and the United States in order to create a new model of physics communication. The founding members defined the collaboration's mission as "Not only to support the international science of particle physics but to set visible footprints for peaceful collaboration across all borders." At their initial meeting in Hamburg, the members decided to develop a new, collaborative method of global particle physics communication that would be better suited to the global nature of the field. The members developed strategies to strengthen collaboration among laboratory communicators in order to share resources, speak with a common voice and communicate a common science message.

Methods: Common Web site, News Wire

The InterAction collaborators moved forward on several projects. Key among them were the development of a common Web site for particle physics communication and a news wire for the timely distribution of particle physics news.

The Web site, www.Interactions.org , would be designed to serve as a central resource for communicators of particle physics: science journalists, educators, policy makers and opinion leaders, and physicists themselves. The site would be updated daily with news, information, images and links from the world of particle physics. It would provide links to current particle physics news from the world's press; high-resolution photos and graphics from the particle physics laboratories of the world; links to education and outreach programs; information about science policy and funding; links to universities; a glossary; and a conference calendar. It would offer "work space" to groups within particle physics who were preparing reports or studies and needed a common work area for drafts, images, schedules and bulletin boards. It would have a dedicated webmaster with daily responsibility for updating the site.

The News Wire would offer free subscriptions to an electronic news service. Subscribers would receive particle physics news from the world's universities, laboratories, government agencies and others. The first news wire, a press release from CERN, the European Organization for Nuclear Physics Research, on a development in Grid technology, went out to a small number of subscribers on September 17, 2002.

Results

In the two years since its founding, the InterAction Collaboration has created a global electronic News Wire http://www.interactions.org/cms/?pid=1000379 for particle physics news, with over 1,000 subscribers, including most of the world's physics press, from 51 countries. It has issued more than 160 news wires on subjects from dark matter to neutrinos.

In August 2002, the collaboration launched the Interactions.org Web site www.interactions.org .A dedicated Web master monitors physics news from the world's press, maintains an image bank http://www.interactions.org/imagebank/index.html with high-resolution photographs from the world's particle physics laboratories, and continually develops the site to meet changing communication needs.. A Google search for "particle physics news" returns the Interactions Web site as its first entry. Praise from journalists, policy makers and physicists indicates that it reaches those it is designed to serve. Six physics working groups use the Interactions work space for their projects.

Conclusions

The InterAction collaboration began with six member laboratories. It now includes 22 members from laboratories, professional organizations and funding agencies from 10 countries in Asia, Europe and the U.S. Every member contributes to and uses the services of the electronic news wire and the Web site. The collaborators carry out many other joint communication initiatives. Other scientific communities have asked the collaboration's help in developing similar collaborations and Web sites. The Web site has been critical to success in creating a fundamental change in the model of communication in this field of science.

References

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