

EPS programme to be a focus of European Science Week

Learning from Nature

Brian Davies

The European Physical Society will play a key role in this year's European Science Week, which is being overseen in a completely revamped form by the EC's Research Directorate, DGXII.

Sir Arnold Wolfendale, President of the EPS, will introduce 'Learning from Nature' during its official launch at an EPS Reception on November 7 at the *Musées de Beaux Arts et d'Histoire*, Brussels. There will be a corporate presence and display by the Society, a loop video of 'Inspired by Nature' will be showing, as will a CD version of a new EPS web site.

Learning from Nature – 'LEAFON' in EC language – is a three component programme which will reach out across the thirty or so countries represented within the European Physical Society. Its intended audiences include members of the public, school and college students, and those working in physics-based companies and organisations. The three components are: a video/tv presentation, 'Inspired by Nature'; an EPS web site devoted to LEAFON and to European Science Week, which will further be developed as an EPS service beyond 2000, as a part of LEAFON's continuing dissemination programme, and the rolling dissemination programme itself.

The wider programme

Before describing the main features of those three elements of our programme, I

should like to point out that the Learning from Nature programme as a whole, and the 'Inspired by Nature' video / t.v. presentation in particular, are part of a wider, ambitious, 'many media' proposal: a European wide television transmission of a series of six half-hour programmes linked by the (working) title of 'Bridges from Physics'. Bridges from Physics is intended to show, in a straightforward manner, free of gee-whizzery and gimmicks, the exciting ways in which we benefit when bridges of scientific exploitation are built from physics research and development on the one hand, to significant products and processes on the other hand. The Inspired by Nature video is being used not simply as one end product of this wider proposal but also as a vehicle for encouraging television stations across Europe to consider becoming involved in the longer term.

The video/television programme

A theme of Science Week chosen by DGXII is 'The Natural Environment'. Following meetings with an Advisory Panel of distinguished industrialists and young researchers from several European countries, we decided that the video and web site should explore the way in which physical sciences can investigate and then emulate naturally occurring products and processes, often with rich social and scientific rewards.

The five main themes of the half-hour video, *Inspired by Nature*, may be summed up as: Buildings, earthquakes and oil; The world of animals and its counterparts in science; Art, history, medicine and the use of natural radiations; The brain, neural networks and decisions; The human voice and musical instruments. In these contexts, questions such as the following are discussed: what might designers of television screens learn from fireflies? How do earthquakes lead us to oil? Where do brain-mimicking computers help handicapped people? What do whales, gibbons, elephants and mobile phones have in common? Why do ice skaters on frozen Dutch canals rely on neural networks in the UK? or How are we learning precisely when, almost to the minute, Galileo had his world-changing ideas?

The voice over commentary has a limited number of face to camera shots of the main presenter (Susan Rae), because of the need for translations of the commentary into a number of European languages. Finance is the constraint on the number of languages into which the video will be translated in the first phase of its use.

Filming by OMNI Communications, which has an excellent record of making successful documentaries for the European market, has been taking place in industries, in art galleries, in universities, in Joint Research Centres and elsewhere in Europe.

The LEAFON Web site

The new web site will be an integral part of the EPS web site, and is designed to allow considerable development in the near



Call for papers

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future. However, text and still photo sequences from the video will be the main elements to start with. This limitation is important because we want maximum access and user friendliness built in for the greatest possible number of users right across Europe. It would be easy to include running video and animation sequences, but large numbers of computer users do not yet have the computer memory or the software plug-ins needed to access these refinements.

Within the text pages, hyperlinks will lead to more information on a variety of topics. Links will include (i) the physics in the video, (ii) the companies / laboratories / art galleries and museums featured, (iii) career vignettes of some of the scientists featured in the video, (iv) general careers information for a given area of research, etc., provided by featured companies and / or independent sources, (v) the web sites of sister societies of the European Physics Society and its member societies.

Dissemination and follow-up activities

The European Science Week is a major initiative of DGXII, which will be putting considerable resources into its own publicity machine. LEAFON and six other projects spread across Europe are being financed by the EC, and our own publicity and dissemination efforts will be integrated with the EC's and with the other projects whenever possible. There will be carefully targeted press releases from the EPS and from Communiqué PR, who are on subcontract to the EPS, plus information on the EC's Science Week web site, as well as the EPS LEAFON site. Publicity will be sought for activities surrounding the Brussels launch - to which we are also inviting two other European Science Week teams endorsed by the EPS to make presentations. In addition, the EPS is also making a few hundred copies of the videotape available free of charge to its member societies who have shown an interest in receiving and distributing them to their chosen outlets. (Extra copies of the video may be ordered via the web site, at cost price, too). The EC's Joint Research Centres are also expected to play a major role through simultaneous exhibitions and press releases. Finally, follow-up work on the general response to the half-hour video will help us fine tune future video products for the European Market.

Learning from Nature is a most exciting project to be working on, with considerable potential for creating public, as well as school and college, interest across the European Community. The Council of the

European Physical Society deserves great credit for seeing the potential of the project when it was still in its infancy, and deciding to back it with sufficient finance to ensure that a sound proposal would go to the European Community for the substantial funding the project has now gained.

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