

EPS *europhysics news extra* news service  
EurophysNet at <http://epswww.epfl.ch/>

### European Physical Society

EPS Secretariat, P. O. Box 69,  
CH-1213 Petit-Lancy 2, Geneva  
Telephone: +41-22-793 11 30  
Telefax: +41-22-793 13 17  
E-mail: [eps@cern.ch](mailto:eps@cern.ch)  
WWW: <http://epswww.epfl.ch/>  
EPS counts among its members some 4000  
Individual Ordinary Members and 36 National  
Member Societies throughout Europe whose  
members participate in EPS activities.

### Managing Editor

P.G. Boswell, EPS Geneva  
E-mail: [peter.boswell@cern.ch](mailto:peter.boswell@cern.ch)

### Subscriptions

ISSN: 0531-7479

Volume 28: 6 issues will appear in 1997.  
Recommended annual subscription prices –  
institutions: DM 198.–; individuals DM 98.–.  
Special rate for new individual subscribers:  
DM 78.– for one year. All prices plus carriage.  
EPS Individual Ordinary Members receive  
Europhysics News free of charge. Members of  
EPS National Member Societies except the  
German Physical Society and the Institute of  
Physics, UK, receive Europhysics News  
through their society. Subscriptions can either  
be placed via an agent or sent directly to:  
Springer-Verlag, Postfach 31 13 40  
D-10643 Berlin, Germany  
Telephone: +49-30-827 87 358  
Telefax: +49-30-827 87 448  
E-mail: [subscriptions@springer.de](mailto:subscriptions@springer.de)  
Cancellation must be received by September  
30 to take effect the following year.

### Production

PRODUserv

Springer Produktionsgesellschaft  
3050 Journal Production Department  
L. Grenzdörfer, Heidelberger Platz 3  
D-14197 Berlin, Germany  
Telephone: +49-30-827 87 750  
Telefax: +49-30-827 87 440  
E-mail: [grenzdorfer@springer.de](mailto:grenzdorfer@springer.de)

### Advertisements

Springer Verlag

E. Lückermann, U. Evert  
Springer-Verlag, Postfach 31 13 40  
D-14197 Berlin, Germany  
Telephone: +49-30-827 87 733  
Telefax: +49-30-827 87 300

Advertising is charged according to space and  
position, pro rata based on DM 3800.– for a  
full page, black and white. Rates on request.  
Discounts for EPS Associate Members.  
Deadline for orders: on request (normally four  
weeks before publication).

### Printer

Universitätsdruckerei H. Stürtz AG,  
Würzburg

# Natural Spaces

During the crucial 12th century debate on the role of human intellect, Ibn Rûsd (Averroes in Latin) established in his *Destruction of the Destruction* the then disturbing postulate “that the mystery of the universe needs to be understood in terms of human reason”. And it was Castille’s King Alfonso X who argued for the universe’s underlying simplicity and fundamental unity by exclaiming “If God himself had asked me I could have given him good advice to render it easier”. A. Tiemblo Ramos, a former President of the Royal Spanish Physical Society, speaking at the *EPS-10 General Conference* last September in Sevilla felt it natural that such insights into the heart of modern physics should have emerged from southern Spain. For it was there that pilgrims to Compestela de Santiago, entering a melting pot of cultures, “met in the questions” – in contrast to answers which often set people apart.

The region also has modern significance in the form of its *Ara Solis* (alter of the sun) which the Romans built to define the limit of their Empire. For it has become today the limit to a new Union in the making, a Union that is also united in the questions. In Professor Tiemblo’s words, it seems that “European nations are discovering that they are constrained to have a common destiny and are now assisting in the creation of a new kind of political entity” – one that is moving on from a complex pattern of alliances and confrontations which also characterised medieval Spain.

One naturally wonders about the answers. As it is often people at frontiers who have the greater insight, one notes that Professor Tiemblo stressed that strong national identities must be preserved “at any cost” since they represent a cultural and social richness. So one must “add to existing structures, not supplant them”.

Structures in science began to feel the state’s hand in the late-15th century when the desire for wealth creation prompted them to organize cartographers with visions of world domination. Stirred on by the “basic philosophy that science was too important to be left to scientists”, it was inevitable that a lattice of national and international, private and public institutions devoted to research would emerge. And academies and learned societies, in spite of being the “natural space” within which to debate and analyse science, lost much of their importance.

Professor Tiemblo feels that recovering this space is vital because science is too important to be left to politicians and governments. He recognizes that the task will not be easy because science is still often seen as a matter for experts, separated from human and cultural problems. And second, many now question the last century’s conviction that science represents “a great hope for solving the problems of society and guaranteeing unlimited progress”.

He is convinced, however, that ensuring a natural space for science will need a commitment from young people and a commitment to a vision of what physics offers. Neither will be automatic: young people are drawn to the new types of natural spaces which are emerging in our electronic world; and physics must reconcile the need to solve very fundamental, even philosophical, problems such as understanding the structure of the vacuum, while recognizing that many of the most promising new problems are appearing at the interfaces between disciplines.

The most important natural spaces within EPS are probably its Divisions and Groups for it is there that physicists interact at the heart of physics. These spaces are now open to anyone belonging to a national society (the seven EPS Divisions are summarised on page 233 to help people understand a little of what they do; summaries of the Groups will appear later). Conferences (page 236) have always been a feature of the Society’s Europe-wide spaces, so *Europhysics News* has always stressed reports of Division and Section conferences (page 220). Moreover, one need only read the review on global warming (page 213) and the proceedings of the Europhysics Study Conference *Economy-Energy-Entropy* (p. 234) to appreciate that the Society also creates new natural spaces in vital areas.

P.G. Boswell