seminars

ISR SEMINAR

Monday, February 3
14.30
ISR Auditorium
(Top floor of Building 30)

"Effects of space charge and inductive hall impedance on bunched beams in the ISR"
by A. Hofmann

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CERN NUCLEAR PHYSICS SEMINAR

Friday, February 7
11.00
Theory Conference Room

"Parity violation in muonic atoms"
by L. Simons / CERN
Abstract : Parity violation caused by weak neutral current effects may produce different pseudoscalar observable quantities in muonic atoms. The possibility to detect them at meson factories is discussed.

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CERN COLLOQUIA

Tuesday, February 4
16.30
Auditorium

"Physical Processes in Radio-Galaxies"
by F. Pacini / Laboratorio Astrofysica Spaziale, Frascati
Abstract : Some of the basic observational data will be reviewed. Large amounts of energy are stored in these objects in the form of relativistic particles and magnetic field. This poses important problems in astrophysics and cosmic ray physics. Various ideas on the origin and confinement of this energy will be presented and discussed in the light of recent observational data.

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Tuesday, February 11
16.30
Auditorium

"Design of a telescope to see clearly through a turbulent atmosphere"
by F. Dyson / M.P.I. Munich
Abstract : Telescopes have not substantially improved in resolving power since the time of William Herschel (1770) because of the degradation of image quality by the atmosphere. Hardware projects are in existence at various places to build a telescope with a flexible mirror and a feed-back system designed to compensate the effects of atmospheric seeing in real time. My contribution to these efforts has been to solve the software problem, i.e. to define the computer program which will in optimum fashion tell the mirror what to do in order to improve the quality of the image, using the image itself as the computer input.

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CERN APPLIED PHYSICS SEMINAR

Wednesday, February 5
14.30
Auditorium

"Nuclear energy and new energy supply concepts"
by H. Barnert / Kernforschungsanlage Jülich
Abstract : Nuclear energy has proven to be economically competitive. Therefore energy programs from several governments predict a large increase of Nuclear Power Plants. Alongside the production of electricity it is necessary to introduce nuclear energy into the market for non-electrical energy which covers about 90% of the consumed energy. Some of the concepts for the supply of non-electrical energy are : 1. the nuclear district heating; 2. the long-distance supply of nuclear energy; 3. the nuclear coal gasification and, 4. the nuclear water splitting. The products of these systems are hot water (and electricity), substitute natural gas and hydrogen. Research and development work for the new energy supply concepts is done at the Nuclear Res. Center Jülich and at many other places. By these means, nuclear energy can contribute to the solution of the energy crisis.