

More books

● *Information and Biographical Guide* by M G Shafranov (in Russian) Joint Institute for Nuclear Research, JINR Press 5 85165 488 0 (US\$ 15). Produced and published by the Joint Institute for Nuclear Research (JINR), Dubna, near Moscow, this is a compilation of JINR discoveries, prizes and literature, and of its scientists, history and much other useful information. The book includes more than 500 short biographical summaries of the scientists who created this research centre, who have worked or are working there, including specialists in physics, mathematics, chemistry, radiobiology and engineering from more than 20 countries. E-mail "post@office.jinr.ru", fax (7 095) 975 23 81.

● *Applications of Noncovariant Gauges in the Algebraic Renormalization Procedure* by A Borech, S Emery, O Moritsch, M Schweda, T Sommer and H Zerrouki, World Scientific 9810234562. This text goes a step beyond the algebraic formulation of renormalization using covariant gauges.

● *Sources and Detection of Dark Matter in the Universe* edited by D B Cline, Proceedings of the Workshop on Primordial Black Holes and Hawking Radiation and 3rd International Symposium on Sources and Detection of Dark Matter in the Universe, 17–20 February 1998, Marina del Rey, reprinted from *Physics Reports*, Elsevier Science.

● *Hadrons in Dense Matter and Hadrosynthesis* edited by Jean Cleymans, Hendrik B Geyer and Frederik G Scholtz, Proceedings of the 11th Chris Engelbrecht Summer School, Cape Town, 4–13 February 1998, Springer 3 540 65209 4.

● *Lectures in Synergetics* by Volodymyr I Sugakov, World Scientific 9810234953 (hbk £28).

In the World Scientific series on Nonlinear Science

● *Introduction to Quantum Computation and Information* edited by Hoi-Kwong Lo, Sandu Popescu and Tim Spiller, World Scientific 981023399X (hbk £35).

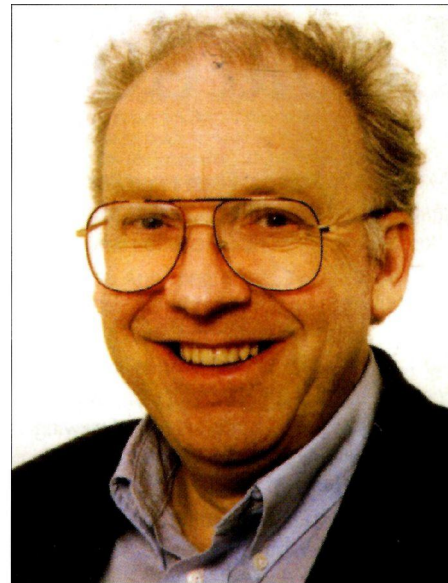
This provides an introduction to a dynamic new subject. The book is partially based on lectures organized by the editors and given at the Basic Institute in the Mathematical Sciences, Hewlett-Packard Laboratories, Bristol, UK.

Max Born prize

The UK Institute of Physics and the German Physical Society have awarded the Max Born medal and prize for 1999 to John Dainton of Liverpool for outstanding contributions to physics, in particular his pivotal role in a series of experiments at the DESY laboratory in Hamburg, which have provided new insights into the structure of the photon and proton.

As a research student at Oxford, Dainton used hadronic beams and bubble chambers, but all of his subsequent research has been carried out using counter experiments with beams of real photons, electrons and positrons, and electrons and protons. He believes strongly that an experimentalist should be able to contribute to detector construction and physics analysis.

From his work in the early 1980s with the PLUTO collaboration at the PETRA electron-positron collider at DESY, Dainton produced valuable measurements of real photon structure. This remained a vital benchmark until recently, when his group at Liverpool extended the kinematical range. He led the UK group in the design and construction of the H1 detector at DESY's HERA electron-proton collider and carried out the first H1 measurements, which revealed new behaviour similar to hadronic diffraction. He was appointed H1 physics coordinator in



John Dainton – Max Born Prize.

1995 and played a major role in the analysis of intriguing wide-angle scattering events.

The German Physical Society (Deutsche Physikalische Gesellschaft) and the UK Institute of Physics award the Max Born prize annually in memory of the work of Max Born (1882–1970) in Germany and the UK. First awarded in 1973, the prize goes to British and German physicists in alternate years.

Bogoliubov prize for young scientists

The Joint Institute for Nuclear Research, Dubna, near Moscow, has set up the N N Bogoliubov prize for Young Scientists in memory of the eminent physicist and mathematician Nikolai Nikolaevich Bogoliubov (1909–92).

The prize will be awarded to young (up to 33-year-old) researchers for outstanding contributions in fields of theoretical physics related to Bogoliubov's scientific interests. As a rule the prize will be awarded to a scientist who has shown early scientific maturity and whose results are recognized worldwide. Entries should try to emulate Bogoliubov's own skill in using sophisticated mathematics to attack concrete physical problems. The first prize will be awarded this summer and presented at the conference marking the 90th

anniversary of Bogoliubov's birth, which is to be held in Dubna at the end of September.

Entries (including a curriculum vitae and a one- or two-page abstract of the submitted papers) should be forwarded to the Directorate of the Bogoliubov Laboratory of Theoretical Physics of the Joint Institute for Nuclear Research by 1 May (e-mail "premia99@thsun1.jinr.ru") or to Dr V I Zhuravlev, Scientific Secretary of Bogoliubov Laboratory of Theoretical Physics, JINR, Joliot-Curie str. 6, 141980 Dubna, Russia.

● Nikolai Nikolaevich Bogoliubov's scientific activity began in Kiev at the age of 14 and important results followed from the age of 20. His main interests were nonlinear mechanics, statistical physics, quantum field theory and elementary particle theory.