

At the 25th anniversary of the Gesellschaft für Schwerionenforschung (GSI) heavy ion research Laboratory in Darmstadt (left to right) - Hessian Minister for Science and Art Christine Hohmann-Dennhardt, Chairman of the GSI Board Hartmut Grübel, CERN Director General Chris Llewellyn Smith, President of the Deutsche Forschungsgemeinschaft Wolfgang Frühwald, and Dirk Schwalm, Managing Director of the Max Planck Institute for Nuclear Physics in Heidelberg.

(Photo Jürgen Schmidt)

Orsay/Perugia/Pisa/Saclay/Siegen/Turin/Vienna collaboration, aims to study the small asymmetry in the properties of matter and antimatter known as CP violation, and should be fully ready to collect data next year.

Through its links with Dubna's Joint Institute of Nuclear Research (JINR), near Moscow, NA48 has launched a number of initiatives designed to involve Russian physicists and industry in the experiment. The bargain 22 tonnes of krypton for NA48's energy-measuring calorimeter were manufactured at a specially-built factory in Russia. INTAS, the European Union-backed scheme for the promotion of cooperation with former Soviet Union scientists, provides funds for Dubna physicists to visit Western Europe. INTAS will also provide computing and networking infrastructure allowing the Russian physicists to participate fully in NA48's programme.

As well as the cryostat, NA48's collaborating institutes have placed other orders with Russian suppliers. INFN Pisa has ordered 14,000 electrical feed-through contacts from the Budker Institute in Novosibirsk, whilst Saclay has placed contracts elsewhere for vacuum and other equipment.

The new cryostat forms part of a joint project of INFN Pisa and CERN, involving scientists from Dubna, Edinburgh, and Saclay. The Russian part was built by Krunichev Enterprises in collaboration with ENTEK, a large institute of the Russian Federation's Atomic Energy Ministry. The cryostat will be assembled together with an internal cryostat built by INFN Pisa, and will eventually house NA48's krypton calorimeter. The calorimeter will be fully assembled by the middle of next year.



GSI DARMSTADT 25 years

On May 12, Hans J. Specht, Scientific Director of the Gesellschaft für Schwerionenforschung (GSI), welcomed an audience of more than 500 to celebrate the 25th anniversary of the Darmstadt heavy ion research Laboratory. Warm greetings and best wishes from Jürgen Rüttgers, Federal Minister for Education, Science, Research and Technology were presented by Hartmut Grübel, Chairman of the GSI Board. The Hessian Minister for Science and Art, Christine Hohmann-Dennhardt, pointed out that the promotion of various fields of research cannot be judged only by the expected return for everyday life. Joachim Treusch, the Chairman of the Association of National Research Centres, went

further by stating that basic research, driven by curiosity and not aiming at short term applications, is a necessity.

Darmstadt Mayor Peter Benz expressed his pride in having such a prestigious Laboratory in the city and looked forward to a new element named after it.

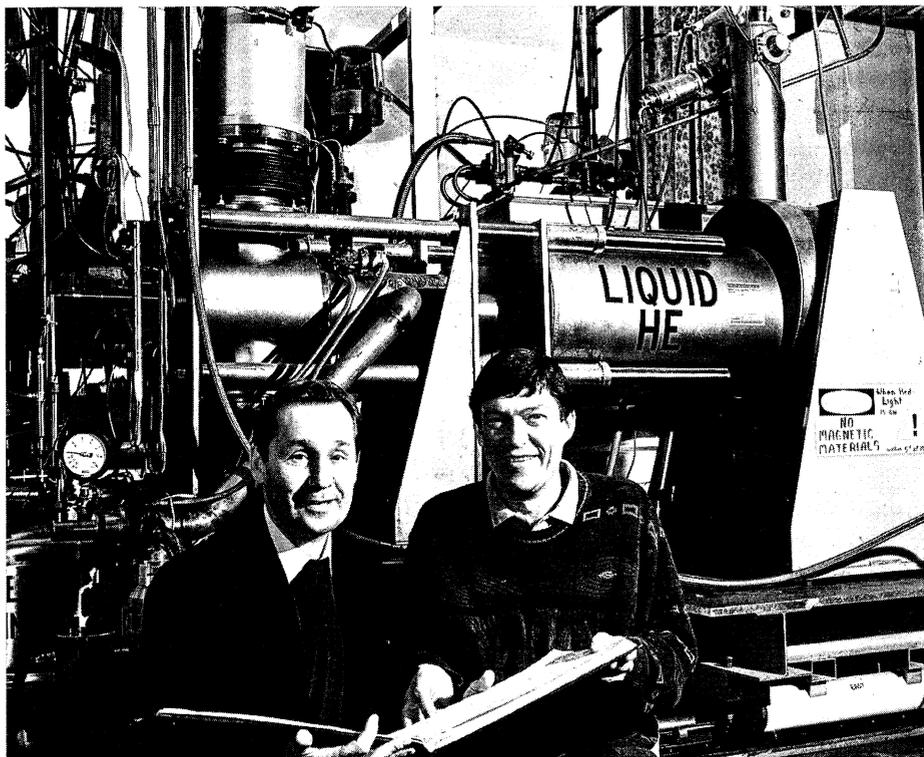
CERN Director General Chris Llewellyn Smith underlined the growing importance of international and inter-regional scientific collaboration and paid tribute to the role of German physicists in general and GSI in particular in CERN's work. GSI is a major partner in the international lead ion programme at CERN which came into operation last year, a scientific and technological success which provides a useful role model for future international partnerships. After pointing to interesting parallels between the two Laboratories - both basing new projects on existing facilities, and both serving large user

The DAPNIA (Saclay, France) and Argonne transportable polarized target used in 1989-1990 for a Fermilab experiment has been used in a new experiment at Dubna. Gilles Durand from DAPNIA (right) and Yuri Usov of Dubna's Joint Institute for Nuclear Research (JINR) were responsible for construction.

communities - he thanked GSI for its valuable contributions to CERN.

Highlights from the 25 years of GSI were summarized in a talk by Dirk Schwalm, Managing Director of the Max Planck Institute for Nuclear Physics in Heidelberg. Among other points he presented the unique accelerator facility and the discovery of the five heaviest elements. He stated that many dreams from the founding period of GSI had become a reality, and even what one had not dared to dream of is on its way to becoming reality, e.g. tumour therapy with ion beams.

In a very well received talk, Wolfgang Frühwald, President of the Deutsche Forschungsgemeinschaft, discussed the relation between basic and applied research. He stated that the rules for technological innovations cannot be applied to basic research which in contrast must continue as an open science. While innovation and basic research are separate, nevertheless each needs the other to advance.



RUTHERFORD APPLETON What's in a name?!

The initials 'RAL' are well known in the world of particle physics, but recently the official name of the Laboratory has undergone several transmogrifications. To further complicate matters, the funding body for Particle Physics within the UK has changed too!

On 1 April 1994 the Rutherford Appleton Laboratory combined with the Daresbury Laboratory to become a combined laboratory known as the Daresbury and Rutherford Appleton

Laboratories (DRAL). At the same time the old Science and Engineering Research Council (SERC) was wound up, and funding was channelled through the newly formed Particle Physics and Astronomy Research Council (PPARC). Also, and just for an interim period, DRAL became part of the new Engineering and Physical Sciences Research Council (EPSRC).

One year later a more profound change occurred when DRAL became a Research Council in its own right, and the legal entity created by Royal Charter was named 'The Council for the Central Laboratory of the Research Councils', abbreviated to CCLRC. On 1 April 1995, DRAL became 'The Central Laboratory of the Research Councils', and the abbreviation CLRC may be used.

In spite of the changes to the official name, the laboratory sited at Chilton,

Oxfordshire, will continue to be known as the Rutherford Appleton Laboratory, or RAL.

DUBNA Spin effects

Earlier this year, a collaboration of Russian, Ukrainian and French laboratories measured the difference between the polarized neutron and proton total reaction rate (total cross section difference) at slightly higher energies than previous experiments, providing an interesting hint of an effect predicted by theory. This was measured using a beam of longitudinally polarized neutrons and a longitudinally polarized proton target with parallel and antiparallel polarization directions.