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there were opportunities. The project got redirected, leading to the STM. But we needed a close commitment and technical efficiency — a “continuum of capabilities”. This also shows the complementarity of basic and applied research.

Will the shift in emphasis lead to changes in the way IBM organizes its basic research? How are the changes being felt in Zurich? In particular, the company announced this week a further reduction in staff. Will there be changes in Zurich?

Zurich is currently evaluating areas to look for opportunities for “the world of IBM”. This is something we have always done and we

maintain the dual goal. With respect to the physical sciences, I don't see a fundamental change, but there might be a slight shrinking.

Is there a possibility of a RCA situation? (Editor's note: when GE in the USA bought RCA, the RCA lab in Zurich was absorbed into the Paul Scherrer Institute which was seeking at the time to extend activities).

There is no indication of this. Zurich, I believe, will remain one of the Division's three core labs. I don't see physics being squeezed out: activities in the area are important. They may be different in size and scope as we shift emphasis higher up the food chain.



Europhysics Notes

● New Elements Named

A team from the Gesellschaft für Schwerionenforschung (GSI), Darmstadt, Germany, led by Professors Peter Armbruster and Gottfried Münzenberg has been attributed with the discovery in 1981-4 of three new elements by a special IUPAP/IUPAC commission. The names of the new elements, made public at a ceremony at GSI on 7 September, are Nielsbohrium (element 107); Hassium (108) after the State of Hasse, GSI's co-founder; and Meitnerium (109) after the nuclear physicist Lise Meitner.

● New CERN Director

CERN's Committee of Council proposed last month Professor C.H. Llewellyn Smith as CERN's next Director General to replace Professor Carlo Rubbia. Endorsement by Council in December would mean his taking up duties on 1 January 1994. Professor Llewellyn Smith, who will be 50 next month, heads the University of Oxford Physics Department and is Chairman of the CERN Scientific Policy Committee. Educated at Oxford, he has been closely involved with CERN since 1968 when he was a Fellow in the Theoretical Studies Division.

● SSC Funding Maintained

A US Senate vote in August on the fiscal 1993 Water and Energy Appropriations Bill granted 550 M\$ in Department of Energy funding for the 8200 M\$ SSC collider under construction in Texas. The difference with the House of Congress vote on a 17 June amendment to reduce funding to 34 M\$ to effectively halt the project was resolved by a House-Senate Conference Committee that agreed on 484 M\$. The final 247/143 vote by the House on 17 September on a compromise bill accorded 515 M\$, some 100 M\$ less than was originally sought.

● Partnerships No Match for Programmes

The US President appointed on 1 September the first Director of the National Coordinating Office for the 800 M\$, 5-year High Performance Computing and Communications (HPCC) programme. HPCC has ambitious plans to develop a digital National Research & Education Network with Gbit/s capacity and computers with scalable performance up to a teraflop (10^{12} operations/s). Lattice quantum chromodynamic (QCD) calculations in high-energy physics are often considered as an “ice-breaker” for the later. Hence, Columbia University which

built a 16 Gflops (peak speed) QCD machine joined two other universities to form one cornerstone of the US teraflop initiative - a 40 M\$ project for a 2.5 Tflops massively parallel computer that would run QCD calculations by 1995 using technology related to Thinking Machine Corp.'s CM-5 machine. Professor Enzo Marinari from Italy's INFN in Rome, in reviewing QCD calculations at the CHEP92 conference in Annecy, France, felt the schedule was “impressive but very tight” and the approach cost-effective. He said the trend elsewhere is towards partnerships. The INFN that started running QCD calculations 4 years ago using a purpose-built 1 Gflops machine has developed the APE series of massively parallel machines. It recently signed an agreement with Laben, to produce and sell from mid-1993 a 96 Gflops APE-100 model comprising a 4 x 4 array of the APE 6 Gflops model commissioned 6 months ago.

Overall, however, European-level initiatives in HPCC's two main areas remain low-key: the follow-up of a 1991 study for the Commission of the EC of high-performance computing [EN 22 (1991) 64] chaired by Professor C. Rubbia has been released as we go to press. It defines and costs several options for consideration in the EC's next 5-year budget presently being discussed by Ministers. Meanwhile, in a parallel initiative, a Consultative Forum of specialists has issued a working paper called *Challenges Ahead* that recommends spending about 200 MECU for high-capacity academic and research networks.

● Mobility Scheme Admits 115

The first meeting in Geneva on 9/10 October of the Mobility Committee of the European Mobility Scheme for Physics Students decided that the Universities of Ghent and Hannover would coordinate EC funding applications. 115 Institutions were admitted to the scheme which starts next autumn.

● Trento Recommended for Nuclear Theory Centre

The Steering Committee for a future European Center for Theoretical Nuclear Physics meeting in Orsay on October 12 to consider site proposals from Legnaro and the University of Trento, Italy, decided to recommend the latter to NuPECC as it afforded the “best opportunity”. Recommended for the initial Board of Directors are J.-P. Blaizot (Saclay), S. Fantoni (Trieste), B. Mottelson (Copenhagen), C. Pethick, and W. Weise (Regensburg). Proposal from Copenhagen and Utrecht had been withdrawn earlier owing to poor financial possibilities.