



Dear EPS Member,

Taking the opportunity of the appearance of this special computational physics issue of Europhysics News, I should like to inform you about the activities of the Computational Physics Group (CPG) of EPS.

The CPG was created in 1972 as a body to coordinate overlapping computer activities of members of different EPS Divisions. Most members of CPG are also members of at least one of the Divisions and, indeed, any member of a physics division can at no extra cost become a member of CPG. We encourage you to do so.

In the past, the main activity of CPG was the organization of conferences (eight were organized) on specific computational physics problems, but we realized at the last conference (on computational plasma physics) that interest in such an activity had gone down owing to computational physics having penetrated into all branches of physics. Computational x-physics is x-physics. We do not believe that such specialized conferences any longer have a future. More promising are interdisciplinary conferences and a first general interdisciplinary Computational Physics Conference is to be organized in Boston, in September 1989 by the Computational Physics Division of the American Physical Society (created last year). The idea is that computational x-physicists can mutually learn from computational y-physicists. It is proposed that the CPG-EPS organize the second such conference in autumn 1990 and that Japan takes over in 1991. This means that every third year such a general computational physics conference will be organized in Europe. We are looking for an organizer for the 1990 conference.

Another main activity of CPG was the organization of seven Summer Schools in Czechoslovakia and one in Switzerland. The themes of these courses are interdisciplinary subjects based on the use of computers for physicists. Typically, the last summer course (9-18 June 1987, Bechyne, Czechoslovakia) was on "Microcomputers in Physics", the one this year (5-9 September 1988 in Puidoux, Switzerland, see announcement on page 19) on "Numerical Methods for Parallel Vectorcomputers" and next year on "Man-Machine Communication in the Scientific Environment" (19-28 September 1989 in Skalsky dvur, CSSR). The main subjects to be treated in this last school will be logic programming, symbolic manipulations, scientific text processing and interfaces to CAD systems with applications. The manu-

Personal Computing in a Physics Environment

Ian Willers, CERN

The Influence of Personal Computing

One year a student came to CERN and was given the task of writing a program that would automatically print labels that were to be placed on magnetic tapes. A suitable printer was purchased and attached to the IBM mainframe computer that runs the IBM central computing service in CERN. The student produced a program that he had laboriously proved to be correct. However, on running the program it instructed the printer to print labels with such rapidity that the printer gave up. The student then introduced some loops that merely consumed time and did no useful computing. The program worked for the first time. The program also consumed vast amounts of computing power and the student easily received that month's award as the prime user of computing power at CERN.

He visited the Systems Group who provided him with a routine that sus-

ended the job for a given period of time during which it used no resources. Suspending the job however put him at the end of the job queue. When the IBM had only a few users the program ran perfectly. But when the number of users increased the period between the printing of labels got longer and longer. The solution was to use one of IBM's more humble products, the IBM-PC, which was happy to print labels at a constant rate with none of the complications of using the main IBM computer.

There are now many personal computers doing this type of work inside physics laboratories. However, a closer look shows the personal computer user preparing documents, doing accounts, writing small analysis programs with graphical output, controlling equipment in accelerators and so on. When the humble personal computer runs out of steam, its big brother the personal workstation takes over. The personal work-

scripts of the lectures are published in the journals Computer Physics Communications and Computer Physics Reports.

Besides these summer schools, the CPG Board proposes to start new activities in the following domains:

- creation of electronic libraries (important articles on specific subjects, efficient sub-routines for high speed computers)
- organization of an electronic newsletter
- electronic mail system management
- collect video cassettes on computer physics, courses, seminars and organize a service of distribution.

To be able to realize these ideas we are looking for young interested physicists who will become members of the CPG Board. An election campaign is under way. We look forward to your proposals and thank you in anticipation.

R. Gruber, Chairman CPG

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