ties, light shifts, etc.) and many relaxation problems.

Optical pumping magnetometers and atomic clocks have been developed: the Laboratoire de l'Horloge Atomique was set up in Paris by the Centre National de la Recherche Scientifique to investigate, at Kastler's request, how important this line of research might be.

Kastler succeeded in creating a very favourable climate for basic research. He was very open minded, his knowledge of physics was very broad and deep. He put forward a great number of clever ideas. In the community of French physicists, he stood as a person of great originality and, many times, as unconventional. In a large measure, this was due to the fact that he had a deep and complete knowledge of French and German cultures.

He was deeply committed to international cooperation in the scientific and political fields: his interest in the International Centre for Theoretical Physics in Trieste and his participation in the many activities of the EPS are two examples of this involvement. He was among the very first to enrol as an Individual Ordinary Member and was a member of the organizing committee of the 1st General Conference, in Florence, chairing the sessions on quantum electronics and optics. Later, he was a delegate for the Individual Ordinary Members on the Council, and the first chairman of EGAS which was to become the Atomic Spectroscopy Division and then a Section of the Atomic Physics Division of EPS. His continuous fight for peace, against any kind of oppression and for human rights is well known and was an essential aspect of his personality.

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John Adams (second from left) in perhaps his finest hour as the SPS starts up.

An Engineer Amongst Physicists

Europhysics News records with regret the death in March, at the age of 63, of another founder member of EPS — Sir John Adams. Three times a Director-General of CERN and Director of the "300 GeV" proton synchrotron project (SPS), member of Council and the Scientific Policy Committee, as well as numerous international consultative committees, he had a major impact on European physics. Yet his instincts were (in English terminology) essentially those of an engineer, and he had no time for the single-minded unworldliness that he saw in some of his "purer" colleagues.

He came to the accelerator field from radar development and worked on the Harwell 180 MeV synchro-cyclotron where his exceptional design talents were quickly marked by J.D. Cockcroft who subsequently encouraged him to be one of the first to join the new organisation, CERN. There he concentrated on the design of the 25 GeV proton synchrotron (PS), taking over in 1954 the Department which built the machine. His first appointment as Director-General, 1960-61, came when he was already preparing his return to England, but during that short period he established the committee structure that was to regulate so effectively the exploitation of the highly successful PS and CERN's subsequent machines. In European physics this was a new departure, the start of big centralised science on a continental scale for which CERN still acts as the pole-star.

Whilst in England, Adams established the thermonuclear fusion laboratory at Culham and after the euphoric period of the early 60s supervised its subsequent contraction as his own unyielding logic as government advisor on science policy was applied to his former creation. Although a subtle advocate of the projects he believed in — a master of the understatement and throw-away line — he was not comfortable in the corridors of politics, lacking the patience to support those he considered inconsistent or the total commitment that can sometimes be required.

His recall to CERN to unscramble the problems of the SPS and then to build the machine in the wake of R.R. Wilson's scintillating performance at the Enrico Fermi Laboratory in the USA, allowed him to display both his organisational and design talents to the full. His style was distinct: having kept his options open to the last possible moment, he would then present an imperturbable firmness. He drove his staff hard but he had the knack of treating them as people and retaining the common touch and a sense of humour. Not everyone agreed with his way of doing things, but none would gainsay his astonishing grasp of all aspects of accelerator design and his genius for elegant solutions to engineering problems. He was knighted in 1981.

In recent years, with the SPS performing in a class of its own, Sir John was much occupied with consultancy work related to the scientific and technical programmes of the European Communities. Europe is the poorer for the summary curtailment of his services in this capacity.

E.N. Shaw