

The European Organization for Nuclear Research (CERN) came into being in 1954 as a co-operative enterprise among European governments in order to regain a first-rank position in nuclear science. At present it is supported by 14 Member States, with contributions according to their national revenues: Austria (1.87%), Belgium (4.02), Denmark (1.93), Federal Republic of Germany (18.92), France (20.57), Greece (1.12), Italy (9.78), Netherlands (3.73), Norway (1.56), Spain (4.16), Sweden (4.10), Switzerland (3.19), United Kingdom (24.40), Yugoslavia (0.65). The budget for 1962 is 78 million Swiss francs.

The character and aims of the Organization are defined in its Convention as follows:

'The Organization shall provide for collaboration among European States in nuclear research of a pure scientific and fundamental character, and in research essentially related thereto. The Organization shall have no concern with work for military requirements and the results of its experimental and theoretical work shall be published or otherwise made generally available.'

Last month at CERN

In the **East bubble-chamber building** the two 30-ton overhead travelling cranes have been tested for safety and are in use for assembling equipment. These cranes are of special interest, since they are operated entirely by compressed air — a safety feature in a building where large quantities of hydrogen will be employed.

The yoke and coils of the magnet for the 1.5-m British hydrogen bubble chamber have now been assembled. Parts of the magnet for the CERN 2-m chamber have arrived, and the framework that will support the chamber body and associated equipment is being assembled on a temporary support of concrete blocks in the centre of the building. In one corner, the large hydrogen refrigeration plant, which will supply liquid hydrogen continuously to the chambers, is being assembled.

low intensity and a long burst from the rest of the beam, has been studied during the last three months. The principle used was to drive the beam momentarily into betatron oscillations of suitable amplitude, by exciting the radio-frequency knockout system with a definite off-resonance frequency, giving one beat of the required duration. A 500-microsecond burst consuming 5 to 10% of the circulating beam has been obtained from a beryllium target 3 mm x 4 mm x 38 mm.

The **Wilson Cloud Chamber** was moved on 7 March from its old position in the South hall to a new one intercepting the neutral beam vi (see CERN COURIER for February, p. 9). Successful runs were made later in the month, using the chamber in conjunction with a separate target faking one pulse in every 60 of the machine.

The CERN **32-cm hydrogen bubble chamber** has been moved out of the North hall, and has been replaced by the **1-m heavy-liquid chamber** belonging to the École Polytechnique, Paris.

After finishing their current experiments at the synchro-cyclotron and the

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The cover photograph shows B. Nicolai (left) and J. Schneuwly engaged on setting up the 6-metre magnet for the (g-2) experiment (see story on p. 3).

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Greater precision in changing targets will now be possible, with the completion of a template enabling this to be done with an accuracy of ± 2 mm.

Beam sharing between two point-source targets, to give a short burst of

This photograph, taken from the gallery in the East bubble - chamber building, shows the massive nature of the magnet for the 1.5-metre British chamber. Behind it, the supporting framework for the CERN 2-metre chamber is now being assembled.

