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SCIENCE RESEARCH COUNCIL

## THE RUTHERFORD LABORATORY

## RESEARCH PHYSICISTS

There are vacancies in the Bubble Chamber Research Group of the High Energy Physics Division for post-doctoral physicists with experience of the application of the bubble chamber technique to elementary particle physics research. The group is presently engaged in analyzing photographs from bubble chambers exposed to beams from the C.E.R.N. proton synchrotron and in exposure and analysis of pictures taken in an 80 cm. bubble chamber exposed to beams from the Nimrod 7 GeV proton accelerator. The bulk of the work over the next few years will arise from use of the 150 cm. British National Hydrogen Bubble Chamber in collaboration with university groups to study interactions of K and  $\pi$  mesons from Nimrod with hydrogen and deuterium. This second chamber has operated at C.E.R.N. with great success and is undergoing a programme of improvements before it begins data collection again early in 1967. The Bubble Chamber Research Group contains a Measurements Section with four conventional measuring machines and eight scanning and rough digitising machines, the latter providing output for a flying spot digitiser. The forthcoming installation of an I.B.M. 360/75 computer will ensure a high rate of measurement and analysis.

These appointments will be made for fixed terms of from three to five years, will carry benefits under the F.S.S.U., and will attract salaries in one of the following ranges, according to age and experience:

£1,340 (with 3 years post-graduate experience) to £1,685 or £1,870 to £2,310 or £2,410 to £3,325

Candidates should apply in writing to Mr. G. N. Pickles, The Rutherford Laboratory, Chilton, Didcot, Berks., quoting the Reference A92.

cally with the result that the gyroscope forms an accelerometer measuring changes of equilibrium position in terms of all three directions of the angular-acceleration vector. Ryzhanov would coat the droplets with radioactive cobalt and measure the change in their rotations produced by absorption of electrons emitted by the coating. He presents a derivation to show that the effect would be large enough for measurement.

#### Chinese restaurant system

Referees for high-energy theoretical papers are now selected by the Chinese restaurant system. The editors of Physical Review Letters select one referee from Group A and one from Group B. The groups were established when one theorist complained that a paper sent to the wrong referee would be automatically rejected. It is still not clear which group any particular theorist belongs to. Perhaps the criterion is simply that first suggested by Richard Feynman: highenergy physicists fall into two categories-either they group or they disperse.

### Reactor landmark

The X-10 reactor at Oak Ridge National Laboratory was designated a Registered National Landmark in ceremonies held on 13 Sept. Such status is conferred by the National Park Service on historic sites, objects and buildings as part of a program for their preservation that began in 1935.

The X-10 reactor, which was originally called the "Clinton pile," went into operation on 4 Nov. 1943. Its construction had started on 2 Feb. 1943, two months after Enrico Fermi had demonstrated the world's first successful controlled nuclear chain reaction in his laboratory at the University of Chicago.

X-10's first task was the production of plutonium-239 in gram quantities for use in the nuclear weapons program then under way. After World War II, the reactor became a prime source of commercial radioisotopes, which it continued to supply until the late 1950's. X-10 was retired from service in November 1963.