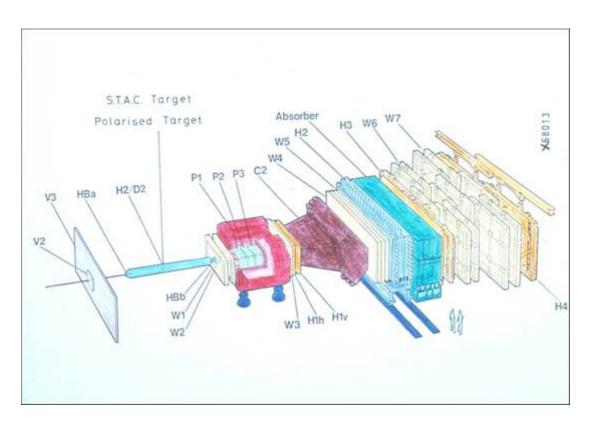


## **EMC**

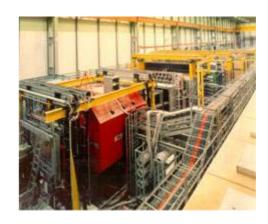
The European Muon Collaboration carried out scattering experiments in the North Area of the CERN Super Proton Synchrotron



A schematic layout of the EMC apparatus when a polarized hydrogen target was used.



A view of the EMC apparatus looking upstream



A view of the EMC apparatus looking downstream

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## THE RATIO OF THE NUCLEON STRUCTURE FUNCTIONS $F_2^N$ FOR IRON AND DEUTERIUM

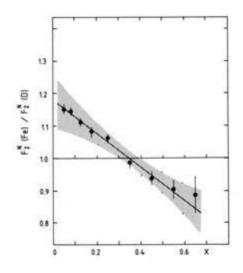
The European Muon Collaboration

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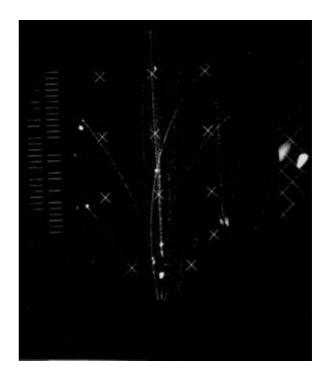
A major discovery of the EMC experiment was that the quarks in a proton or neutron are affected by the nuclear environment.

This shows itself as a strong difference between scattering from

Deuterium and from Iron



In a later stage the target for the muon scattering was placed in a "streamer chamber" which produces spots of light along the tracks of the particles. These were then photographed and the film scanned in the same way as that from bubble chambers.



These multiwire proportional chambers were built in Oxford. They served to measure very precisely the trajectories of the incoming muons

