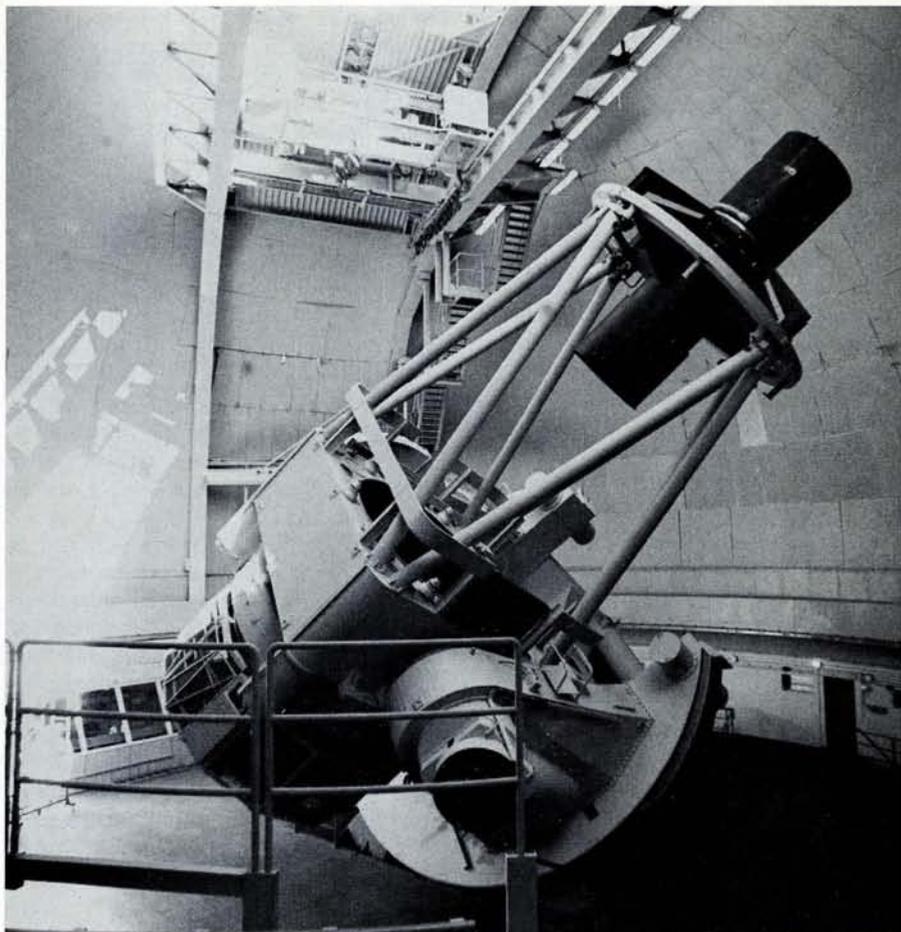


ESO 3.6 m Telescope

(ESO is a collaboration of : Belgium, Denmark, France, the German Federal Republic, the Netherlands and Sweden)

The first pictures have been taken with the 3.6 m telescope of the European Southern Observatory, mounted at latitude $29^{\circ} 15' S$ on the edge of the Atacama Desert at an altitude of 2400 m. Earlier in the year the main structural components had followed the mirrors out to S. America and installation begun. In spite of the remoteness of the site and the need for all technical equipment to be brought from Europe, assembly work went smoothly. Tests with an uncoated mirror were made in the autumn and finally in November all was in readiness for the mirror to be taken out and aluminized for the first time. The plant for doing this is inside the telescope building.

Observations with the telescope will be made to start with at the prime focus ($f/3$) while commissioning of the Cassegrain ($f/8$) and coudé foci ($f/30$) will follow respectively in the Spring and Summer of next year. The instrument has still to be fully tuned but the first pictures are of excellent quality



and it is already clear that ESO has a very fine instrument in its hands. The viewing programme is evidently not going to be easy to establish as the Organization has already far more requests from astronomers in its six

member states than it will be able to cope with. Moreover the Schmidt telescope also mounted at the La Silla Observatory is regularly providing new data which merit study with the big instrument.

Conference Reports

Nuclear Physics with Heavy Ions

More than 300 physicists from 26 countries met in Caen (France) from 6-10 September, at the Third Nuclear Physics Divisional Conference of the EPS, to discuss heavy ion physics. The venue of the Conference — motivated by the site of the future French heavy ion accelerator GANIL — proved to be more than justified by the rich and interesting surroundings, the smoothness of the organization and the interest the local community took in the Conference.

The Conference treated the following main topics :

- nucleon transfer in heavy ion induced reactions ; spectroscopic studies,
- the macrophysics of heavy ion induced reactions : fusion, deep inelastic processes, etc.
- intermediate structure in the continuum
- heavy ion physics at very high energies.

A large fraction of the Conference time was devoted to deep inelastic processes. These processes involve large transfers of energy and mass yet, the identities of the projectile and

the target are essentially preserved. The way a deep inelastic collision is believed to proceed is illustrated in Fig. 1. In a classical picture the impact parameters of trajectories leading to deep inelastic collisions are midway between the large values corresponding to distant and grazing collisions and the small, head-on collision values. The contact of the projectile and the nucleus is thus intimate enough to permit a large exchange of mass and energy without losing the characteristic features of a fast peripheral collision. A large