Newton Institute Inaugurated

Just over three years ago Trinity College in Cambridge, the college of Isaac Newton, offered money to help set up the national Isaac Newton Institute for Mathematical Sciences. St John's College, the college of Paul Dirac, had already offered to provide a building. At the inauguration of the Institute on 3 July, the Masters of the two

A sketch of the Isaac Newton Institute in Cambridge, UK.

colleges unveiled a bust of Paul Dirac and a portrait of Isaac Newton.

The Institute's architects have succeeded brilliantly in their brief to design a building in which scientists cannot avoid interacting with each other. All those who saw the building at the inauguration were impressed by its pleasant and welcoming atmosphere. In addition to common rooms, seminar rooms and a library, it has office space for some forty scientists and is well-equipped with workstations. The Institute is on the edge of Cambridge, near the Cavendish Laboratory and the Royal Greenwich Observatory.

The main funding came from a number of Cambridge colleges and from the UK SERC. Grants have come also from the French CNRS, the Daiwa Anglo-Japanese Foundation, the Paul and Gabriella Rosenbaum Foundation (USA), N. M. Rothschild and Sons, the Prudential Corporation, the Nuffield Foundation, the London Mathematical Society, The Institute of Physics, and many others. The financial position for the first five years is fairly healthy (though more money would be used well); after that it is uncertain so the University's Development Office is making strenuous efforts to secure the future.

The Institute will mount four programmes a year, each lasting six months. All the participants will be visitors; the only academic with a permanent office is the Deputy Director, Peter Goddard. Theoretical physics will be prominent among the activities and the first two programmes, which run together until Christmas, have a strong physics flavour. Keith Moffatt introduced the programme on dynamo theory at the inauguration by using syrup to show how, while the overall flow of a fluid may be steady, the trajectories of individual particles can be chaotic. Vaughn Jones, introducing the programme on low-dimensional topology and quantum field theory, recalled that Gauss and Maxwell had already been interested in the theory of knots, in their attempts to understand the magnetic field produced by a current flowing in a knotted wire.

Future programmes that have a physics flavour include random spatial processes (July to December 1993), cellular automata, aggregation and growth and geometry and gravity (both January to June 1994). Those wishing to propose further programmes should contact Peter Goddard for information (pg @ amtp.cam.ac.uk). It is expected that all the programmes will be strongly international, and will bring together different areas of expertise to encourage cross-fertilisation between different subjects. As the Director, Sir Michael Atiyah, put it, the idea is to gather together some of the best brains in the world to work on extremely difficult problems which will have applications far into the future.