
Prof P.A.M. Dirac

Paul Adrien Maurice Dirac, a theoretical physicist of extraordinary gifts and accomplishments, died in Florida on 20 October 1984, at the age of 82. He was born in Bristol on 8 August 1902, and during a solitary and not very happy childhood was educated at the Merchant Venturers' School (now Cotham Grammar) where his father taught French. At 16 he came to this University to study Electrical Engineering. After graduating three years later, he stayed on for a further two years to learn Mathematics. His career as a theoretical physicist began when he went to Cambridge in 1923 as a research assistant.

Those were years of growing intellectual excitement leading up to the creation of quantum mechanics in 1925 by Heisenberg and Schroedinger in Goettingen. Dirac seized upon this revolutionary theory and contributed much to its technical development. In particular, he clarified the theory of operators, thereby constructing what Einstein called 'the

most logically perfect formulation of quantum mechanics', and formulated the quantum statistics governing assemblies of particles.

His major achievement (which earned him the Nobel Prize), came in 1928 when, with reasoning of stunning virtuosity, he combined quantum mechanics with Einstein's relativity theory of 1905 to obtain a fully consistent microscopic theory of the electron. This made him one of the handful of scientists with the persistence, insight and good fortune to discover a fundamental law of nature. From the theory came the prediction of the existence of antimatter, subsequently verified by the discovery of the positron.

In 1931 Dirac gave a surprisingly simple argument suggesting that there should be magnetic monopoles and predicting their properties. These particles have proved elusive, and intense current activity, based on his ideas, is devoted to searching for them.

Dirac's approach to a problem was direct: he formulated it in the simplest and clearest way, and in the intense beam of his focused intellect worked undeviatingly to a definitive solution. As Wheeler wrote, 'Dirac

casts no penumbra'. This economy of style was matched by his personality, which was reticent to an extreme that gave rise to numerous legends.

Dirac did not allow his name to be used in any but the most strictly professional contexts, but in his last years he made an exception to this by welcoming the establishment of the 'Dirac Prize' for the best school science project in the Bristol area. For theoretical physicists, however, his memorial will be the continuing influence of his ideas on the technique and content of their science.

MVB

Mr D.M. Gaunt

Many members of the University will have learned with deep regret of the sudden death on 19 October of David Gaunt, Lecturer and Senior Lecturer in Classics from 1965 till his early retirement in 1978. A graduate of Cambridge University, David joined the Department of Classics after 18 years as senior Classics master at Clifton College, preceded by distinguished work at Bletchley Park during the war for which he was