

P.A.M. DIRAC (1902-1984)

Paul Adrien Maurice Dirac was born in Bristol, England, on 8 August 1902. He studied engineering in his hometown, and obtained his degree in physics and mathematics at Cambridge University, where in 1932 he became professor of mathematics in the Lucasian Chair, which had been held by Sir Isaac Newton two centuries earlier. After his retirement, Professor Dirac went to live in Tallahassee, Florida, where he taught at Florida State University from 1971 until his death on 20 October 1984.

A member of the Royal Society since 1930, he won the Royal Medal in 1939 and the Copley Medal in 1952. Professor Dirac shared the Nobel Prize for Physics with Erwin Schrödinger in 1933. He invented the well-known relativistic wave equation predicting the existence of spin and of the positron when he was only 23 years old. His further work includes his formulations of quantum field theory, statistics of fields and particles, gravitational waves and the prediction of magnetic monopoles.

Dirac first came to Trieste in June 1968 on the occasion of the International Symposium on Contemporary Physics, at which he delivered a lecture on the methods of theoretical physics. After this symposium, Dirac was a guest of honour at the Centre for a month or so nearly every year. In 1972, at a symposium on The Physicists' Conception of Nature organized in honour of Dirac on the occasion of his 70th birthday, he gave a lecture on Fundamental Constants and their Development in Time. Dirac also attended the Marcel Grossman Meeting held at the Centre on the centennial of the birth of Albert Einstein in 1979.

Abdus Salam, who proposed the institution of the Dirac Medal, was Dirac's student at Cambridge and it was after having listened to Dirac's lectures that he decided to devote his life to research rather than becoming a civil servant in his country. He remained in touch with his master and became his friend.

DIRAC MEDAL



Abdus Salam with P.A.M. Dirac
Cambridge University, 1965



The Abdus Salam
International Centre
for Theoretical Physics



2021 DIRAC MEDAL CEREMONY

14 July 2022
ICTP Budinich Lecture Hall
15:00



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THE 2021 DIRAC MEDAL AND PRIZE

ICTP awarded its 2021 Dirac Medal and Prize to four distinguished physicists--Alessandra Buonanno, Max Planck Institute for Gravitational Physics, Germany; Thibault Damour, Institut des Hautes Études Scientifiques (IHÉS), France; Frans Pretorius, Princeton University, USA; and Saul Teukolsky of Caltech and Cornell University, USA.

“For establishing the predicted properties of gravitational waves in the curvature of spacetime produced when stars or black holes spiral together and merge. This achievement was essential for the LIGO detection of gravitational waves from these energetic astronomical events. The consistency of theory and observation is an impressive check of the accuracy of the General Theory of Relativity.”

CEREMONY PROGRAMME

Welcome remarks

ICTP Director **Atish Dabholkar**

Remarks by a Representative from the Government of Italy

Introduction to the pioneering contributions of the 2021 Medallists

Kip Thorne*, Caltech, USA

Medallists Lectures:

Alessandra Buonanno,

Max Planck Institute for Gravitational Physics, Germany
“Ever More Accurate Predictions of Black-Hole Dynamics and Gravitational Radiation”

Thibault Damour,

Institut des Hautes Études Scientifiques (IHÉS), France
“Black Hole Binary Dynamics from Classical and Quantum Gravitational Scattering”

Frans Pretorius,

Princeton University, USA
“Open Questions on the Dynamics of Black Holes”

Saul Teukolsky *,

Caltech and Cornell University, USA
“The Coming Revolution in Computational Astrophysics”

Question and answer session moderated by

Prof. Atish Dabholkar

* online participation

Inauguration, ICTP Dirac Medallists Exhibit

The Dirac Ceremony will be followed by the unveiling of ICTP’s new photo exhibition of its Dirac Medallists in the Leonardo Building.