

## 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



## 2022 DIRAC MEDAL CEREMONY

**28 August 2023**  
**ICTP Budinich Lecture Hall**  
**14:00**



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## THE 2022 DIRAC MEDAL AND PRIZE

ICTP awarded its 2022 Dirac Medal to three distinguished physicists “for groundbreaking and mathematically rigorous contributions to the understanding of the statistical mechanics of classical and quantum physical systems”.

The 2022 Dirac Medallists are:

- Joel L. Lebowitz, Center for Mathematical Sciences Research, Rutgers, State University of New Jersey, USA
- Elliott H. Lieb, Princeton University, USA
- David P. Ruelle, Institut des Hautes Études Scientifiques, France.

## CEREMONY PROGRAMME

### Welcome remarks

Prof. Atish Dabholkar, ICTP Director

### Medallists Lectures:

*“Boltzmann’s Entropy for Macroscopic Systems: Classical and Quantum”*

Prof. Joel Lebowitz\*

*“The Interaction of Mathematics and Physics”*

Prof. Elliott H. Lieb\*

*“On the nature of properly human mathematics”*

Prof. David Ruelle

### Question and answer session

Moderated by Antonello Scardicchio, Senior Research Scientist, CMSP

The Dirac Ceremony will be followed by the **Graduation Ceremony of ICTP’s 2022/2023 Postgraduate Diploma Students**, during which the **Qaisar and Monika Shafi Prize** for an outstanding ICTP Postgraduate Diploma student will be awarded.

\* online participation