

Biosketches of the recipients of ICTP's 2016 Dirac Medal Award

Nathan Seiberg

Nathan Seiberg is a theoretical physicist who has made significant contributions to what has been described as a revolution in fundamental physics.

Seiberg's discoveries have had a decisive influence on the burgeoning field of string theory and other quantum field theories, and are central to the advancement of fundamental theoretical physics today. With various collaborators he has found exact solutions of supersymmetric quantum field theories and string theories. Leading to many new and unexpected insights, these solutions have applications to mathematics and to the dynamics of quantum field theories and string theory.

Seiberg has been a professor at the Institute for Advanced Study since 1997, after serving previously at the Institute from 1982-85, 1987-89, and 1994-95. From 1985 to 1986, he was a Senior Scientist with the Weizmann Institute of Science, Israel, where he served as professor from 1986 to 1991. He taught at Rutgers University from 1989 to 1997.

Seiberg received a B.Sc. (1977) from Tel Aviv University and a Ph.D. (1982) from the Weizmann Institute of Science.

Mikhail Shifman

Mikhail Shifman was born on April 4, 1949, in Riga, Latvia. He received his education in Moscow Institute for Physics and Technology (1966-1972). In 1972 he was admitted to a graduate program at the Institute of Theoretical and Experimental Physics (ITEP), Moscow. He received his PhD (1976) from ITEP on the topic of the penguin mechanism of weak flavor-changing decays. He stayed with ITEP until his departure for the US in 1990. Since 1990, Shifman is a member of the William I. Fine Theoretical Physics Institute at the University of Minnesota where he is the Ida Cohen Fine Professor of Physics. Being one of the world's leading experts on quantum chromodynamics and supersymmetric Yang-Mills theories at strong coupling, he has had the honor of receiving a number of prestigious prizes including the Alexander von Humboldt Award (1993), Sakurai Prize (1999), Julius Edgar Lilienfeld Prize (2006), and the Pomeranchuk Prize (2013).

Arkady Vainshtein

Arkady Vainshtein was born in 1942 in the Siberian city of Novokuznetsk. He attended the Novosibirsk State University and completed his Masters (1964) and Ph.D. (1968) at the Brudker Institute of Nuclear Physics. Dr. Vainshtein's interest in physics from his earliest days of research have been concentrated on the gauge theories of fundamental interactions and remain his main area of his research. In 1990, Dr. Vainshtein came to the United States as a Professor at the University of Minnesota, where he is now the Gloria Lubkin Professor and a member of the William I. Fine Theoretical Physics Institute. He has received a number of top physics prizes, including Pomeranchuk Prize (2005) and Sakurai Prize (1999).