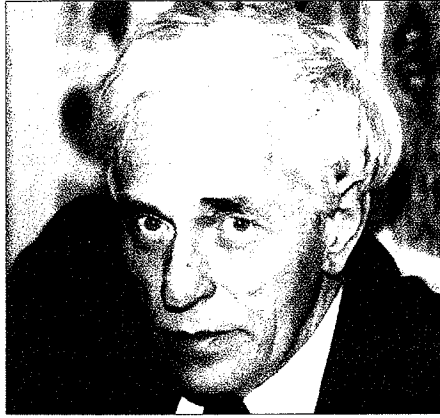


Aleksandr Chudakov 1921–2001

Aleksandr Chudakov, outstanding Russian scientist in the field of cosmic-ray physics, passed away on 25 January at the age of 79.

Chudakov was born on 16 June 1921 and graduated from Moscow State University in 1948. In 1953 he confirmed experimentally the existence of the transition radiation predicted by V L Ginzburg and I M Frank in 1945. In 1955 he predicted the effect of decreasing ionization losses for narrow electron-positron pairs, which was later referred to as the Chudakov effect. Phenomena similar to this effect are now found in quantum chromodynamics.

In the 1950s Chudakov carried out a series of experiments investigating cosmic rays outside the atmosphere with rockets and the first satellites, which resulted in his discovery (in collaboration with S N Vernov) of the Earth's radiation belts during the third



Aleksandr Chudakov 1921–2001.

Soviet Sputnik flight.

In 1961, with G T Zatsepin, Chudakov suggested the air Cherenkov method for gamma-ray astronomy and carried out a

pioneering experiment at Katsively, Crimea.

From the mid-1960s he headed the design and construction of the Baksan underground scintillation telescope (one of the first large multipurpose facilities for underground physics, which was put into operation in 1978). First-class results in astroparticle physics and cosmic rays were obtained with this instrument, which is still in operation.

Aleksandr Chudakov was one of the leaders of cosmic-ray science of his time. Being for some time a chairman of the IUPAP Cosmic Ray Commission, he was known and highly respected by the community all over the world. His death is a great loss to his friends and colleagues.

● Distinguished CERN physicist Douglas Morrison died on 25 February. A full tribute will appear in the next issue.