Sidorov turns 70

Veniamin Sidorov was 70 on 19 October. An outstanding member of Gersh Budker’s Siberian school, he started his career in Kurchatov’s Institute after graduating from Moscow in 1953. His inventiveness and experimental skills were shown while creating a unique multichannel time-of-flight neutron spectrometer for nuclear reactions, and later in experiments performed both at the Niels Bohr Institute in Copenhagen and in Moscow.

Since 1961 Sidorov’s life has been closely linked to the Institute of Nuclear Physics, Novosibirsk, where he joined the pioneer work on electron colliders. Their successful commissioning earned the Lenin Prize of 1967. Sidorov’s laboratory had to develop novel techniques of particle detection for collider experiments. Successful solutions allowed QED tests, studies of vector mesons and observations of the two-photon production, and created a base for future high-precision experiments at electron-positron colliders.

For more than 20 years, Sidorov, with his numerous followers, systematically studied electron-positron annihilation into hadrons using successively complicated detectors, from OLYA and ND to CMD-2 and SND at VEPP-2M, from MD-1 to KEDR at VEPP-4. The low-energy collider VEPP-2M was particularly fruitful: large data samples collected over 25 years significantly improved our knowledge of the properties of light vector mesons.

In 1989 Sidorov and other Novosibirsk physicists were awarded the USSR State Prize for the high-precision measurement of the mass of various particles from the kaon to the upsilon based on the elegant method of resonance depolarization also developed in the Budker Institute.

In the late 1980s Sidorov’s interests helped initiate work on low-dose digital X-ray devices for medical diagnostics. First developed and produced at the Budker Institute, they were useful for a range of medical studies and are now in mass production at two Russian factories. His organizing abilities are used in his position as deputy director of one of Russia’s largest and most dynamic physics centres.