

In Russia, a unique cooling system for a collider was created

The press service of the Institute of Nuclear Physics (IAF) SB RAS reported that the institution's specialists developed and patented the new design of the solenoid—the key element of the Nica collider cooling system.

The installation located in the suburbs is intended for research on processes that occurred in the first moments after the emergence of the universe.

The solenoid is the central part of the magnetic system of electronic cooling. Its main task is to compress and focus on ion beams before a collision. The denser the beam, the more efficiently the experiments are underway, the press service noted.

The design consists of more than 40 thousand details. According to the developers, the use of chilled beams significantly accelerates the conduct of research. Dense bundles allow you to quickly gain statistics of events that are important for science compared to "loose" analogues.