

The press service of the University of Innopolis reported that the specialists of the university information security center presented new algorithms for the protection of digital platforms from potential threats from quantum computers. Development combines artificial intelligence (AI) methods and advanced mathematical approaches to create multi-level protection.

A feature of new algorithms was the use of chaotic calculations that provide additional security due to their unpredictability. Among the key solutions are a tool for creating secure data transmission channels based on cryptographic algorithms.

As the developers explained, the system analyzes special mathematical structures, checks their correctness and optimizes to protect information. Also created solutions for blockchain systems, a trusted environment for crypto operations and improved digital signature algorithms.

According to expert Sergei Petrenko, these instruments are especially important for protecting the critical infrastructure – financial sector, industry and state systems, including the public services portal. The development was conducted as part of the National Program “Economics”.