

## **Methods and construction tools of the information security increase in the heterogeneous cluster systems**

**State registration: 0108U000511.**

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### **Results.**

Principles of organization of the protected high-performance heterogeneous cluster systems (GCS) are developed. The method of adaptive control safety of calculations in GCS is developed, which provides a dynamic reaction on potential threats of safety on the basis of analysis of the new entered parameters: degrees of trust to the resources of GCS and values of the processed information. The formal model of safe administration of subject access to the GCS objects is offered. The methods of minimization of risk of protect are offered. The method of integration of adaptive control safety methods is developed on the basis of PPS gLite 3.

Modern architectures with dynamic reconfiguration are investigational, developed on a base FPGA processor element for the constructions of the mobile computer systems, wireless networks and clusters. The programmatic modules on VHDL languish, which describe the function boxes of processor element, are developed.

The algorithms of forming of code tables are developed in Fibonacci coda and golden ratio base numbers for developed of the self-controlled computer systems which can be utilized in environments with power industrial noise levels.