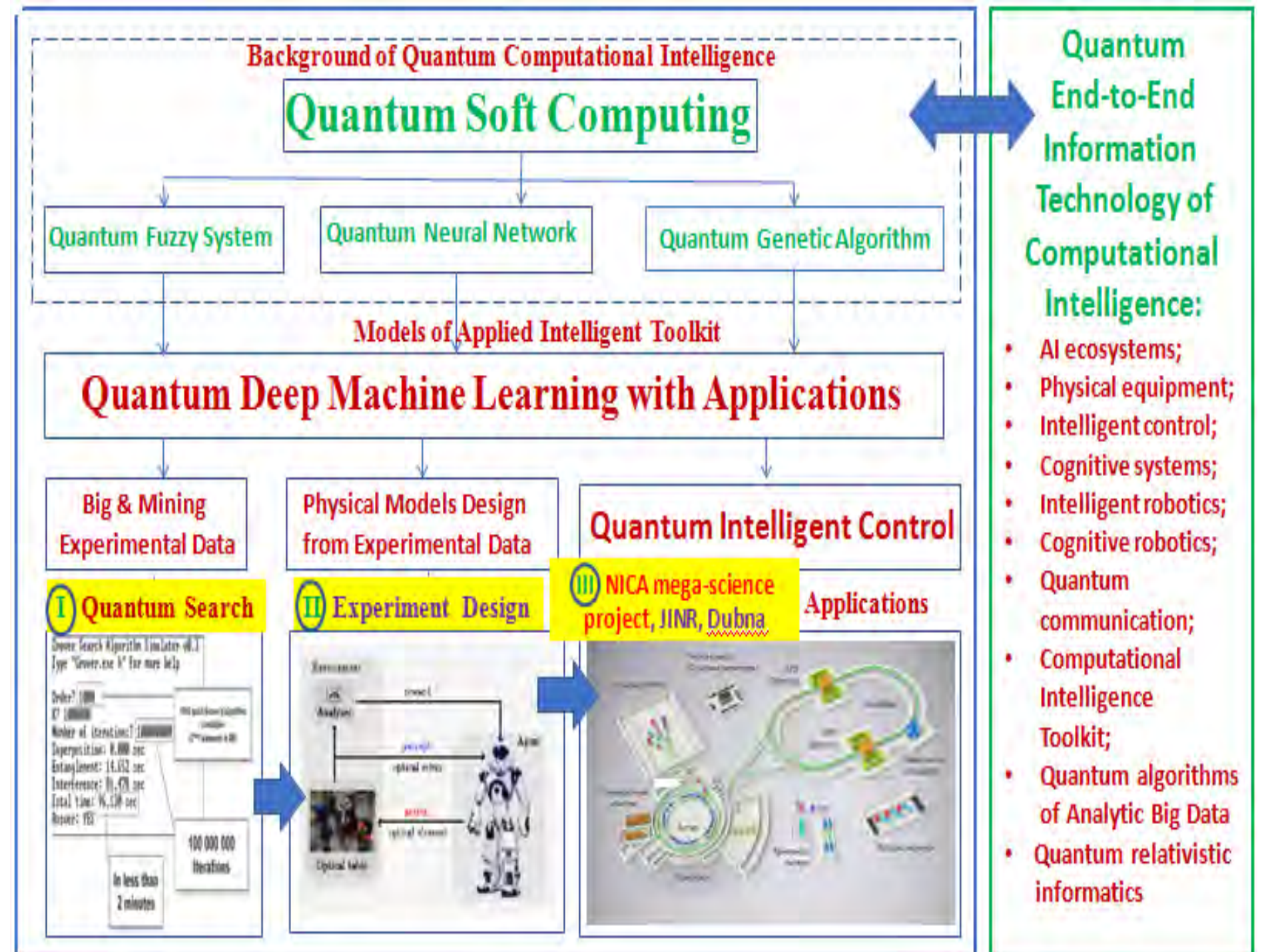
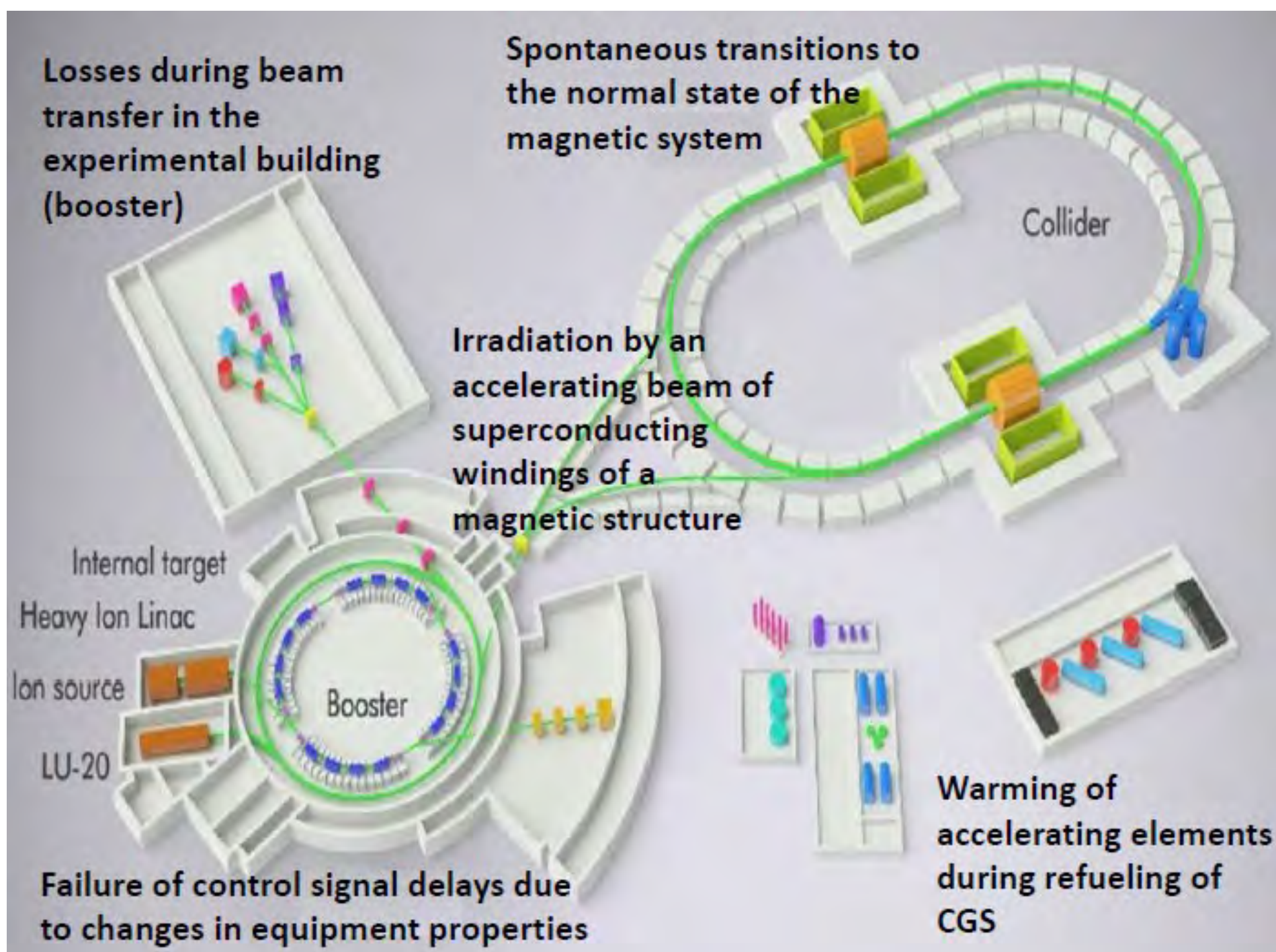


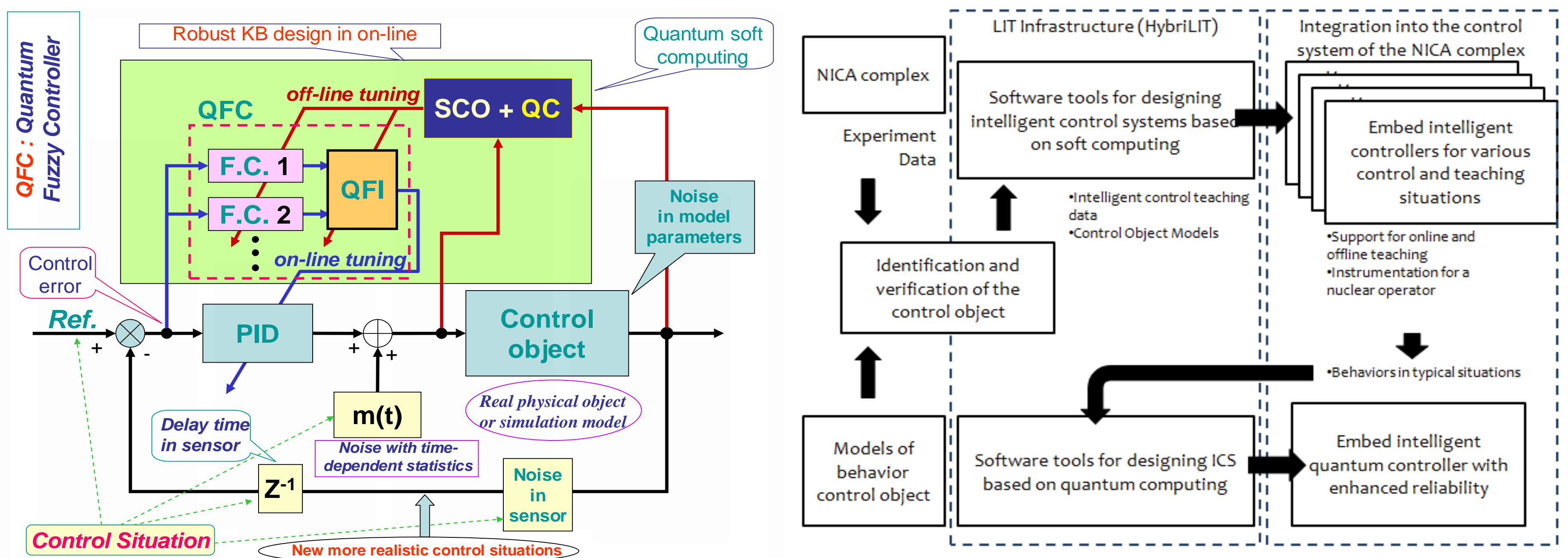
Intelligent robust control system for elements of the accelerator complex

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The poster is devoted to the toolkit description of a software-algorithmic platform for intelligent control (using the example of quantum self-organizing controllers in the control circuit) for the hardware of the current layout of remote control of the cooling process of a superconducting magnet with guaranteed achievement of a stable superconductivity zone. At the same time, optimal control quality parameters are provided, such as temperature, nitrogen consumption, speed, required pressure level and minimal complexity of control implementation. A description of the current layout of a remote control system with built-in self-organizing quantum regulators is presented. The selected structure of the intelligent control system is considered and justified by the example of nitrogen consumption, the operability and efficiency of the developed intelligent control system based on quantum soft computing technologies is experimentally demonstrated.



Embedded self-organizing controller design technology



An example of the use of embedded self-organizing controllers based on quantum computing

