

# TWO-SLIT COMPUTER EXPERIMENTS ON THE BASE OF CELLULAR AUTOMATA MODELS

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One of the most known physical experiments in quantum mechanics and optics is two-slit experiment on transition particles through the screen with two slits. It was important for establishing quantum mechanical description based on probability distribution functions.

It is naturally that the mathematical tools of quantum mechanics allow to understand such behavior. However it is interesting to search the analogs of such experiments in other distributed systems. One of such media for investigation is the cellular automata. It is known that the cellular automata are the media constituted from regularly distributed cells with some states and rules for their evolution.

In proposed material the description of analogs of two-slit experiment for cellular automata is proposed. The results of computer experiments are given. Some interpretations are proposed including distribution of states frequencies during evolution. Also presumable role of strong anticipation in such experiments is discussed.