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Information processing by quantum intelligence networks

A scheme of functioning of a quantum intelligence is suggested. The main difference between quantum and classical intelligences is that the former acts on the basis of quantum decision theory, evaluating prospects by quantum probabilities [1-5]. Owing to the quantum nature, a quantum probability is a sum of two terms, utility factor and attraction factor. Several quantum intelligences compose a quantum intelligence network, where the quantum intelligences play the role of quantum agents interacting with each other by exchanging information. Evolution of opinions in the network depends on the type of agent memory. Dynamics of opinions for short-term and long-term memories are studied numerically.

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