

What are limits of artificial and human intelligence?

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Abstract. Principles and methods that can be a base of investigation of creative intelligence are systemized. Analyzing scientific discoveries history as well as data of cognitive psychology, neurophysiology and artificial intelligence theory it was determined that the main factors excluding algorithmic character of creative work are stochastic nature of inductive conclusion, trial and error method (sequential search method), accident factor in scientific discovery and Gödel's incompleteness theorem. This makes possible to solve 18th problem of American mathematician S.Smole: What are limits of artificial and human intelligence?