

**Название публикации:**

Computational Problems of Multivariate Hypergeometric Theory

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**Аннотация:**

We consider computational problems of the theory of hypergeometric functions in several complex variables: computation of the holonomic rank of a hypergeometric system of partial differential equations, computing the defining polynomial of the singular hypersurface of such a system and finding its monomial solutions. The presented algorithms have been implemented in the computer algebra system MATHEMATICA. © 2018, Pleiades Publishing, Ltd.

**Ключевые слова:**

Complex variable, Computational problem, Computer algebra systems, Hypergeometric, Hypergeometric functions, Hypersurface, Mathematica, System of partial differential equations