

**ON THE METHOD OF SIMULATION OF UNCERTAINTIES OF TECHNICAL
AND ECONOMICAL DATA FOR PROBLEMS OF EVALUATION OF
RESEARCH PROJECTS**

The paper presents a formalized method of the simulation of uncertainties of the numerical reference data applicable to calculations of the technical and economical parameters of a research project and realization of these models in the form of computer programs.

A method of a formal description (simulation) of uncertainty of the reference data is proposed. The major concepts for simulating uncertainties of the numerical data are described. A logical system of an algorithm for constructing the membership function is presented

Constructing the formalized model of uncertainty of the odd numbers of analytical expressions for calculating the indices of efficiency of research projects on the creation of the rocket and space systems makes possible significant decreasing a labor-intensive preparation of the reference data in the computer simulation for the quantitative estimation of a risk level of projects and upgrading the quality of the results of the feasibility study.

Keywords: *uncertainty of reference data, simulation of uncertainty, membership function, beta-distribution, indices of effectiveness of research projects.*

1. Effectiveness of Research Projects and Programs : Book (*in Russian*) / O. V. Pylypenko, Ye. S. Pereverzev, A. P. Alpatov, V. T. Marchenko, O. K. Pechenevskaya, P. P. Khorolsky. – Dniepropetrovsk : Porogi, 2008. – 509 p.