

**Lozovanu, Dmitrii; Fonoberova, Maria**

**A linear parametrical programming approach for studying and solving bilinear programming problem.** (English) [Zbl 1131.65051](#)

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The authors propose an approach for studying and solving a bilinear programming problem based on linear parametrical programming. Using the duality principle for the considered problem they show that it can be transformed into a problem of determining the compatibility of a system of linear inequalities with a right-hand member that depends on parameters, admissible values of which are defined by another system of linear inequalities. Some properties of this auxiliary problem are obtained and a conical algorithm for its solving is proposed. The algorithm is used for finding the exact solution of the bilinear programming problem as well as its approximate solution.

Reviewer: [Stefan Mititelu \(Bucureşti\)](#)

**MSC:**

[65K05](#) Numerical mathematical programming methods

[90C05](#) Linear programming

**Keywords:**

[bilinear programming](#); [linear parametrical programming](#); [system of linear inequalities](#); [conical algorithm](#)