

**Silviu Bârză**, *Probability for the Existence of the Solutions for Constant Sum Integer Programming*

**Abstract**

Because in practical studies, the right hand part of constant sum constraint from constant sum integer programming model is a random variable, we consider that the existence of the solutions for different values of right hand part of constant sum constraint can be considered a probabilistic problem. The aim of this paper is to study this problem for the simplest stochastic version for constant sum integer programming in which only named value is random variable.

**Keywords:** *Constant sum integer programming, combinatorial optimization, integer programming, stochastic optimization, stochastic integer programming, operational research*

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