An Improved Recurrence Method for Simple Continuous Linear Programs

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Abstract—In this paper we discuss a special class of continuous linear programs called simple continuous linear programs (SP). In our recent paper [Wen et al. (2009)], we proposed a recurrence algorithm for solving (SP). The major computational works in the proposed algorithm are finding the global minimal values of the given continuous functions on $2^n$ intervals. However, when $n$ becomes large, it could be rather time-consuming. An improved numerical method for finding approximate solutions for (SP) is proposed to overcome the computational bottleneck.

Keyword—Infinite-dimensional optimization problems; Continuous linear program;

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