

A note on best case optimal value in interval linear programming

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ABSTRACT

Interval linear programming (ILP) is a framework for addressing optimization problems under uncertainty, where intervals represent uncertain parameters. ILP has gained significant attention due to its ability to model and solve real-world problems in various fields, including waste management. Despite its importance, finding the optimum solution for the ILP remains a challenging problem. This paper presents a new way to obtain the optimum solution set's lower bound $\underline{f}$. Our findings offer practical implications for solving real-world optimization problems with interval uncertainty. **Grants:** The authors thank the São Paulo Research Foundation (grant number 2021/03269–7) for the financial support. The second author thanks the Grant PID2021-123051NB-I00, funded by MICIU/AEI/10.13039/501100011033 and by ERDF/EU.

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