

# Solution approaches for a tri-objective MILP model

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In this talk we consider a dynamic and capacitated three-layer supply chain network, formulated as a tri-objective mixed integer linear programming model. Economic, environmental and social metrics evaluating the network performance are defined as objectives, with sets of constraints relating to the supply chain parties and products. Solution approaches for the problem appealing to the lexicographic ordering method and decomposition based heuristics are discussed supported by results obtained from the computational experience performed on sets of instances inspired on real-life cases.

## References

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- [2] MARTINS, C. L., *Redesign of a sustainable food bank supply chain*, Tese de Doutoramento em Matemática Aplicada à Economia e Gestão. Universidade de Lisboa. Instituto Superior de Economia e Gestão, (2019). <http://hdl.handle.net/10400.5/18139>

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