

An Efficient Robust Approach to the Day-ahead Operation of an Aggregator of Electric Vehicles

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Joint work with:

- Ricardo Fernández-Blanco Carramolino
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Autumn School on Bilevel Optimization

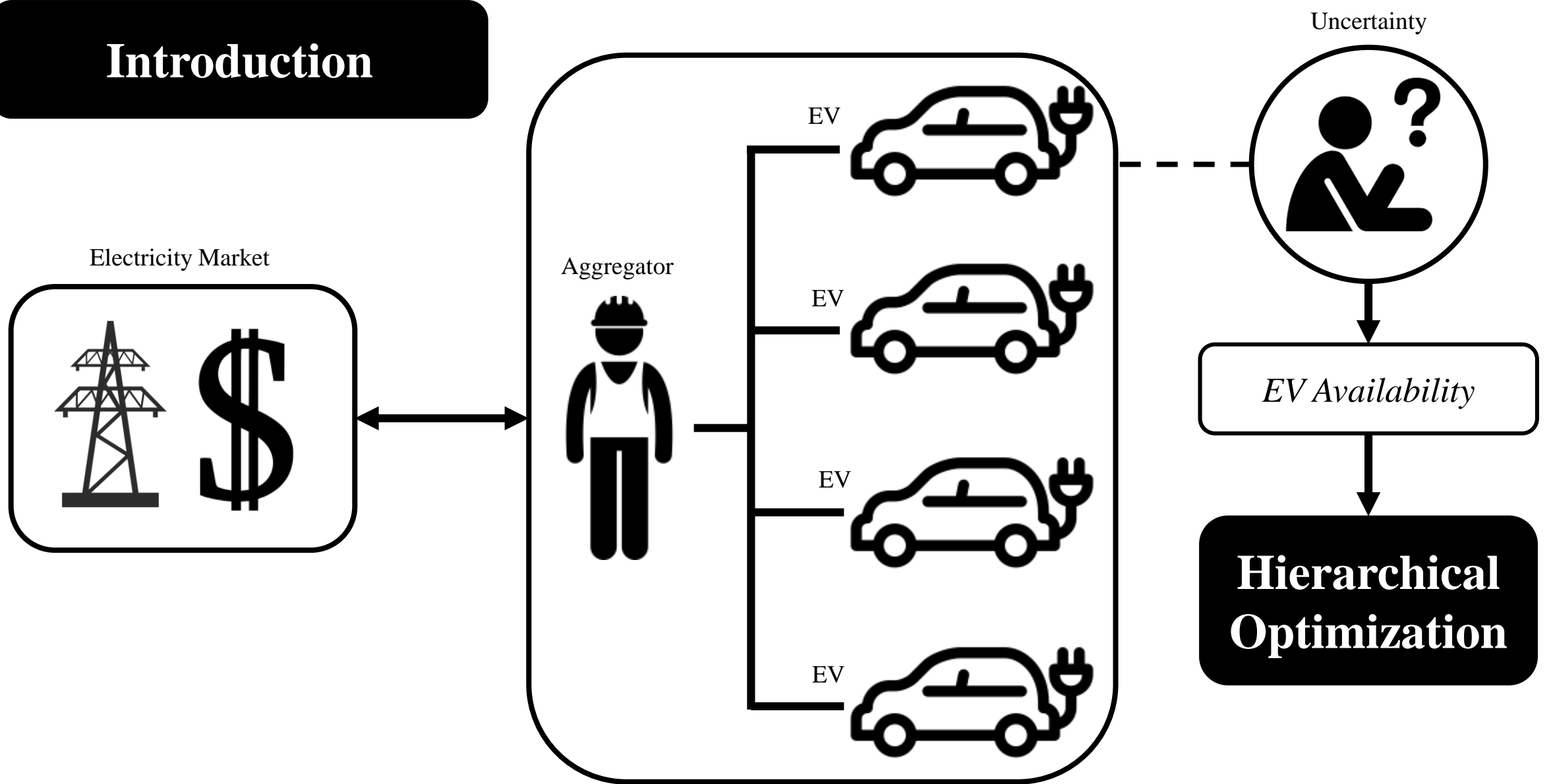
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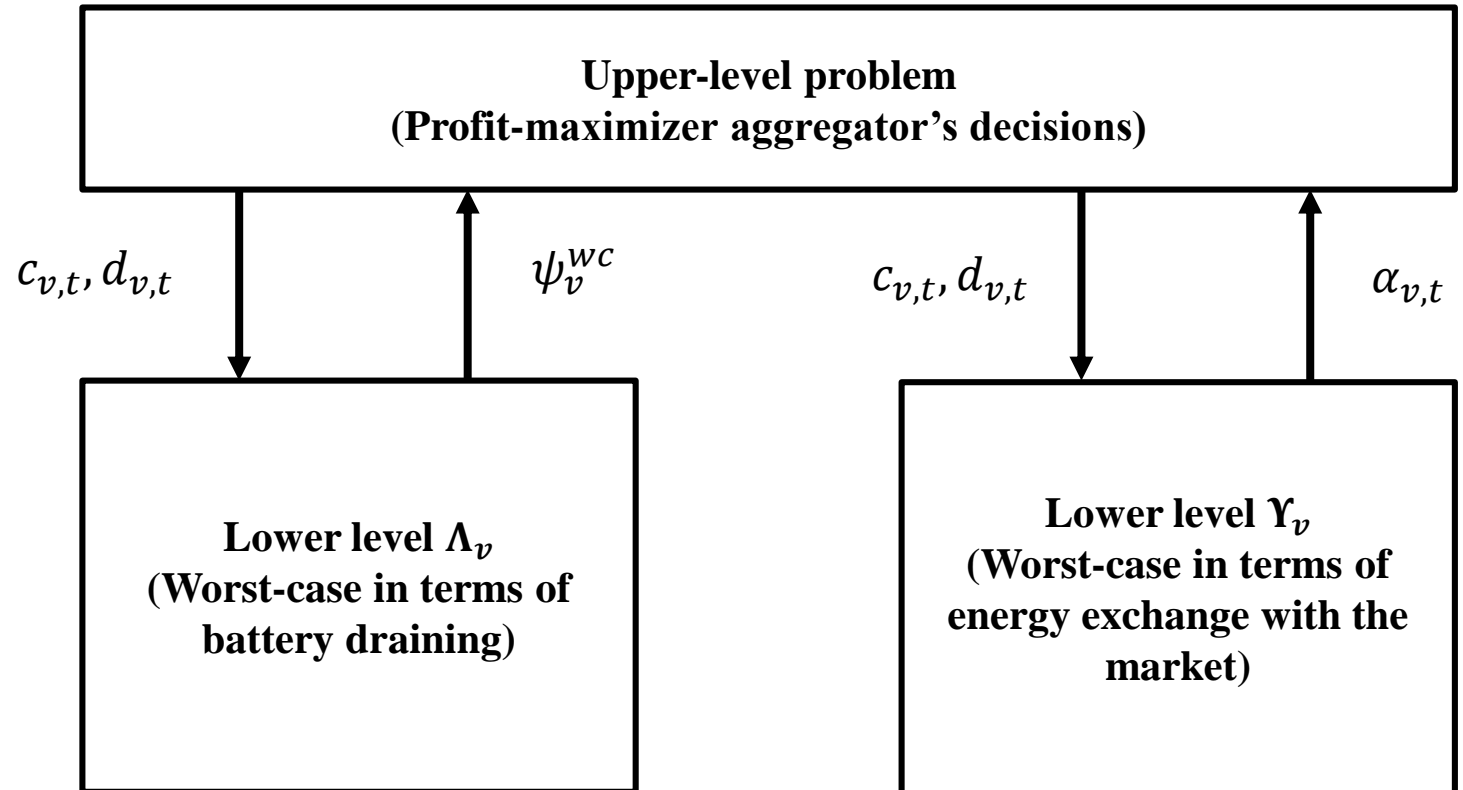
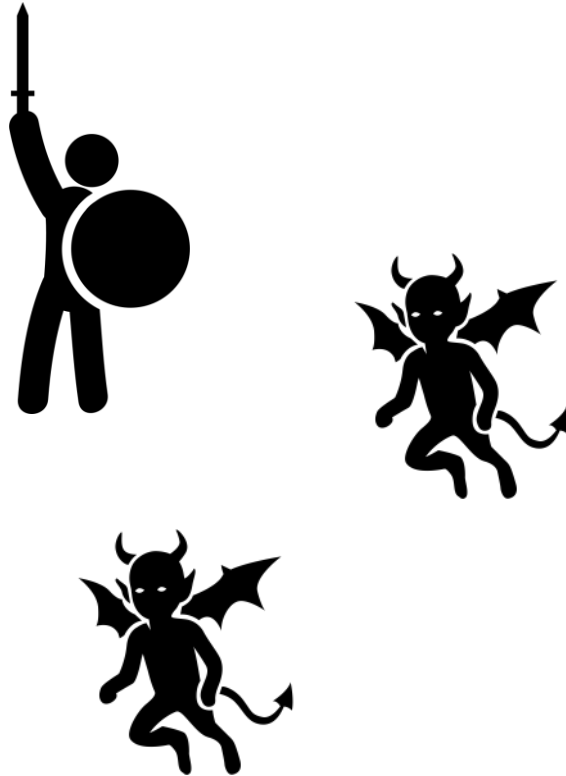


Introduction



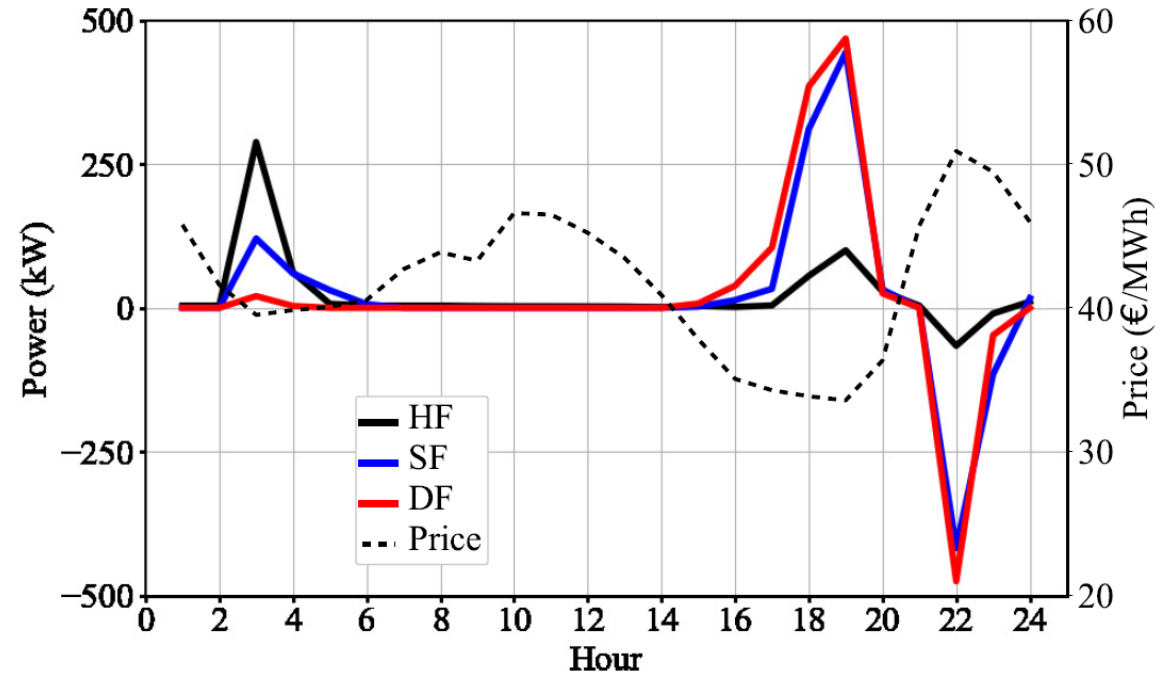
Problem Formulation

Hierarchical Formulation



Case Study

- 120 days of simulation.
- 100 EVs.



Metric	DF	SF	HF
Total Cost (€)	2.282,4	2.708,4	2.888,4
Total energy bought (MW)	162.2	155.1	114.2
Total energy sold (MW)	96.5	83.1	47.7
Deviations from energy balance of EV's battery (MW)	10,3	4,7	4,0
Deviations from the minimum value of energy sold (MW)	13,4	1,2	0,4

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Thank you for your attention

Any question?



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