Messages    **Sophie Huiberts**

Thu, Sep 19, 1:26 PM

Is my feasible point optimal?

It is if there is a dual solution saying so in the polar set

So then a nearby dual solution proves near-optimality?

Correct. Let's find a close-by primal/dual solution pair using Frank–Wolfe style updates

I'll bring my separation oracle

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# Simple iterative methods for linear optimization over convex sets

Theory

Unlike cutting plane methods, we get a convergence guarantee:

$$GAP \leq \frac{R}{r\sqrt{t}}$$

$R, r$    How round is the body?

$t$    How many iterations?

Experiments



Legend:
- Cutting plane method
- Our upper bound
- Our lower bound

(axes: value vs iterations)

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