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CORRECTION

Correction to: On the Approximation of Unbounded Convex Sets by Polyhedra

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In this article, Algorithm 1 was duplicated instead of Algorithm 2. Algorithm 2 is below,

Algorithm 2: An algorithm for (ε, δ)-approximations of spectrahedra

Data: Matrix $\mathcal{A}(x)$ representing an unbounded closed and line-free spectrahedron C with nonempty interior, error tolerances ε and δ
Result: V-representation of an (ε, δ)-approximation P of C

$w \leftarrow (-A_1 \cdot I, \ldots, -A_n \cdot I)^{\mathsf{T}} / \left\| (-A_1 \cdot I, \ldots, -A_n \cdot I)^{\mathsf{T}} \right\|$ // interior point of $(0^+C)^\circ$
$M \leftarrow 0^+C \cap \left\{ x \in \mathbb{R}^n \mid w^{\mathsf{T}} x = -(1+\delta) \right\}$
Compute a $\delta/2$-approximation $\overline{M}$ of M according to Algorithm 1
$\overline{M} \leftarrow \overline{M} + \left\{ x \in \mathbb{R}^n \mid \|x\|_1 \leq \frac{\delta}{2} \right\}$
$K \leftarrow$ cone vert $\overline{M}$
Compute a H-representation $(R, 0)$ of K
Compute solutions x_r^* of $(\mathrm{P}_1(r))$ for every row r of R
$\overline{C} \leftarrow C \cap \{ x \in \mathbb{R}^n \mid w^{\mathsf{T}} x \geq \min_r w^{\mathsf{T}} x_r^* - \varepsilon \}$
Compute an ε-approximation $\overline{P}$ of $\overline{C}$ according to Algorithm 1
$P \leftarrow \overline{P} + K$
return *a V-representation of P*

The original article can be found online at https://doi.org/10.1007/s10957-022-02020-3.

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