

Next Steps

- See if similar techniques can be employed to study matrix-vector product lower bounds for

- Current algorithms use $\mathcal{O}(k/\sqrt{\varepsilon})$ matrix-vector products

- Tight for $k = 1$ [Bakshi, Narayan '23]

- Extending it to all k ?

$$\|A - B\|_2 \leq (1 + \varepsilon) \sigma_{k+1}(A)$$

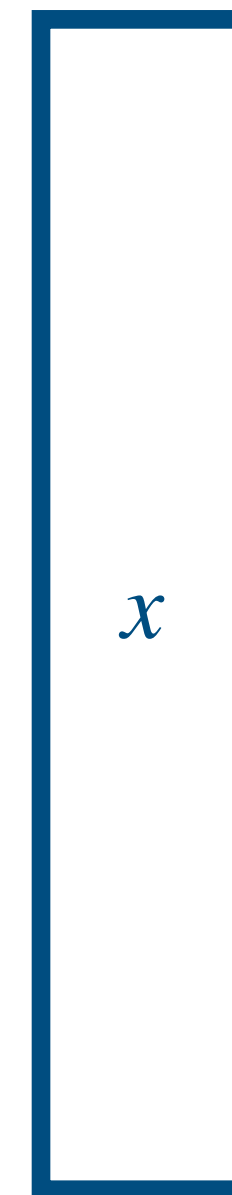
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Turnstile Streaming



x

Updates: (i_1, Δ_1) (i_2, Δ_2) \dots (i_m, Δ_m)