



**Our Result**

**Theorem [K, Woodruff NeurIPS '23]:** Any algorithm using  $n^{2-\beta}$  linear measurements per round must run for  $\Omega(\log n / \log \log n)$  rounds to output  $B$  satisfying

$$\|A - B\| \leq 2\sigma_{k+1}(A)$$

• **Essentially, no intermediate tradeoff!**

2

6

# Our Result

**Theorem** [K, Woodruff NeurIPS '23]: Any algorithm using  $n^{2-\beta}$  linear measurements per round must run for  $\Omega(\log n / \log \log n)$  rounds to output  $B$  satisfying

$$\|A - B\| \leq 2\sigma_{k+1}(A)$$

- Essentially, no intermediate tradeoff!

# Proof Ideas