## Next Steps

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

$$||A - B||_2 \le (1 + \varepsilon)\sigma_{r+1}(A)$$

- Current algorithms use  $O(r/\sqrt{\varepsilon})$  matrix-vector products
  - Tight for r = 1 [Bakshi, Narayanan '23]
  - Extending it to all *r*?

## Turnstile Streaming