Deterministic Algorithm

- Stack $S_1^{(1)}, \ldots, S_t^{(1)}$ to get a matrix $Q^{(1)}$

$$r^{(1)} = \frac{\alpha}{\sqrt{n}} \; Q^{(1)} \; u \otimes v \; + \; Q^{(1)} \; \text{vec}(G)$$

- Based on $r^{(1)}$ pick $Q^{(2)}[r^{(1)}]$

Bayes Risk Lower Bounds