Formalization of replicability

- reproducibility under multiple seeds
- implies good generalization and stability [Impagliazzo et al. 2023]
- [Karbasi et al. 2023] is about tabular infinite-horizon algorithms
- complexity dependent on cardinality of state-action space
- replicability usually sample inefficient [Karbasi et al. 2023]

$\rightarrow$ very strict: $O(n^3)$ sample complexity, $O(\exp(n))$ time complexity

- approximate replicability: high probability of producing same policy with different seeds

$\rightarrow$ $O(n)$ sample and time complexity [Karbasi et al. 2023]