

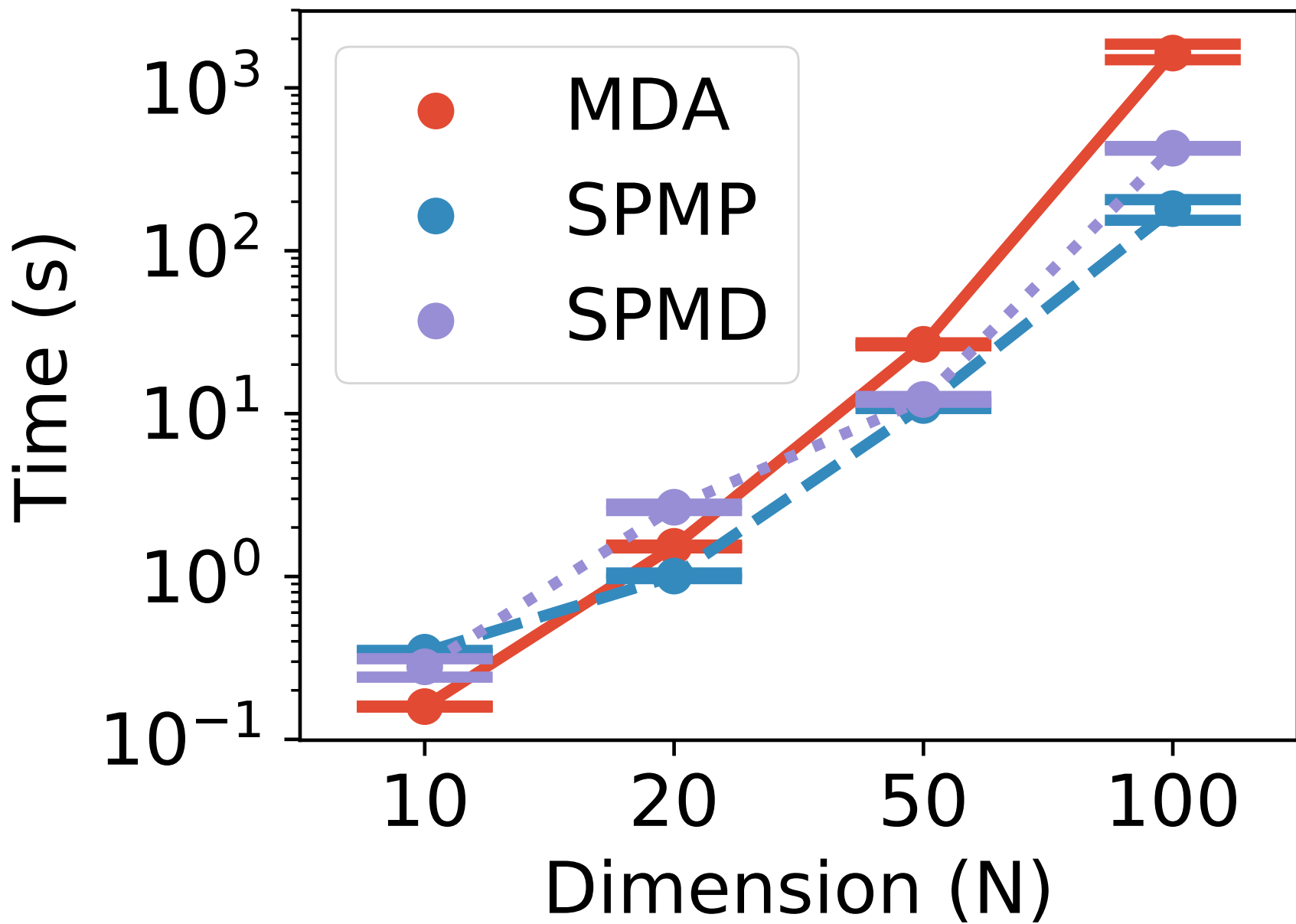


Algorithm Comparison

structuredOT



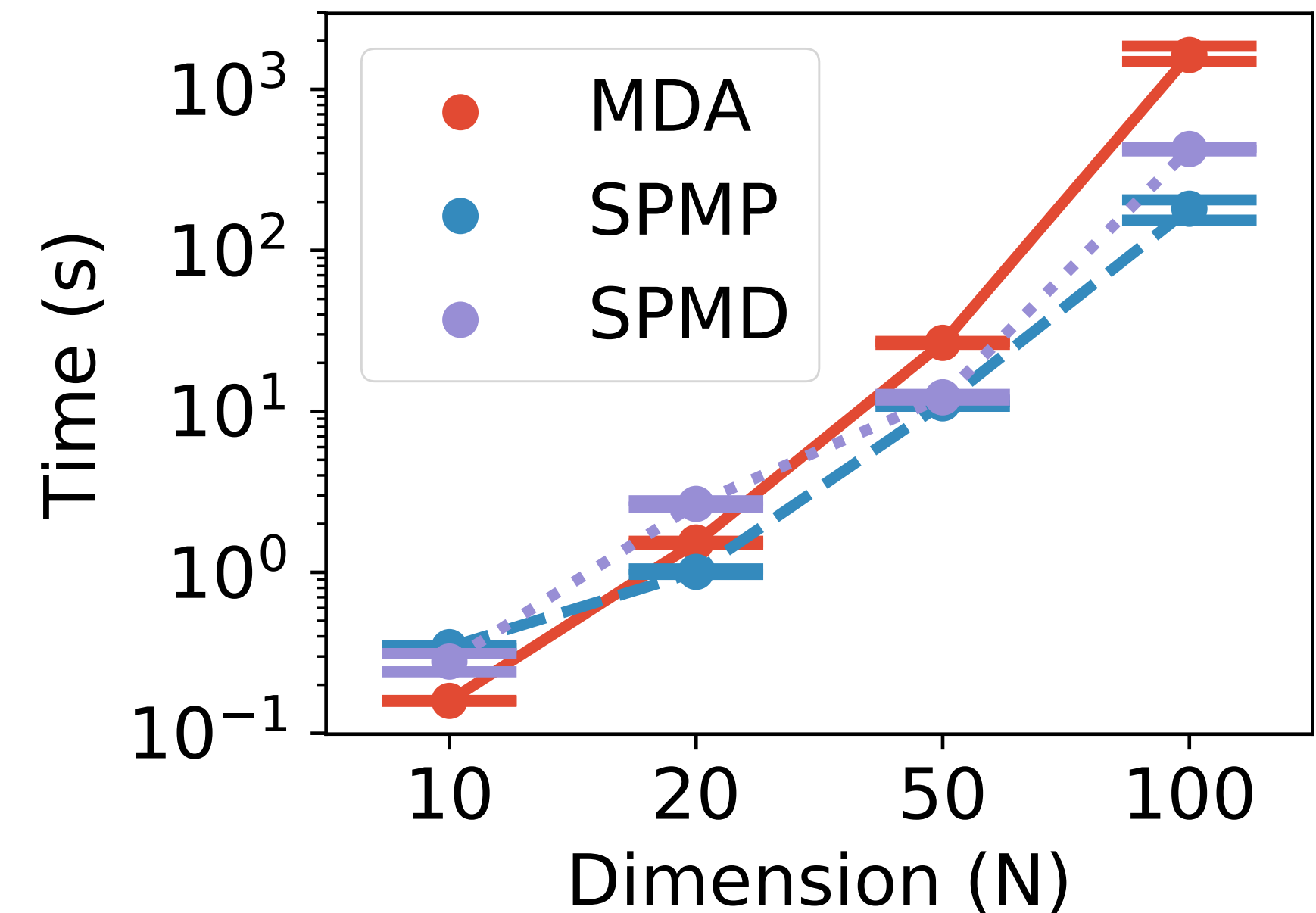
- Convex formulation: Mirror Descent (MDA)
- Min max formulation:
 - Saddle Point Mirror Descent (SPMD)
 - Saddle Point Mirror Prox (SPMP)
- Theoretically: cost-per-iteration vs convergence rate tradeoff
- Empirically: comparable performance SPMP better in large scale regime



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Invariant OT

three views of the problem

- The problem can be expressed in three equivalent ways:

$$\min_{\Gamma \in \Pi(\mathbf{a}, \mathbf{b})} \min_{\mathbf{P} \in \mathcal{F}} \sum_{ij} \Gamma_{ij} d(\mathbf{x}_i, \mathbf{P}\mathbf{y}_j)$$