

A (Slightly) Improved Approximation Algorithm for the Metric Traveling Salesperson Problem

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Abstract

We describe recent joint work with Nathan Klein and Shayan Oveis Gharan showing that for any metric TSP instance, the max entropy algorithm studied by [1] returns a solution of expected cost at most $\frac{3}{2} - \epsilon$ times the cost of the optimal solution to the subtour elimination LP and hence is a $\frac{3}{2} - \epsilon$ approximation for the metric TSP problem. The research discussed comes from [1], [2] and [3].

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