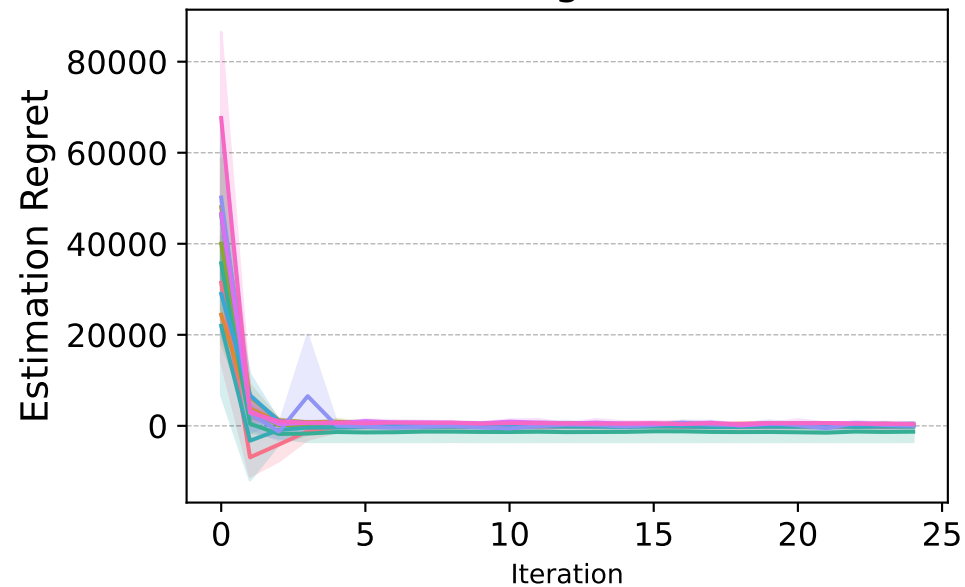













# Estimation Regret Over Time



- |  |  |  |
|--|--|--|
|  PPO Bidder - Net Utility 1 |  Truthful Competitor 5 |  Truthful Competitor 9  |
|  Truthful Competitor 2      |  Truthful Competitor 6 |  Truthful Competitor 10 |
|  Truthful Competitor 3      |  Truthful Competitor 7 |  Truthful Competitor 11 |
|  Truthful Competitor 4      |  Truthful Competitor 8 |  |