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# **Axelrod-Python-Tournament Documentation**

*Release 0.0.23*

**Axelrod-Python Project**

**Sep 17, 2017**



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This documentation contains the latest results of the full tournament from the [Axelrod-Python project](#).

Contents:



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## Standard Tournament

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### **Ranked violin plot**

The mean utility of each player.

### **Payoffs**

The pair wise utilities of each player.

### **Evolutionary dynamics**

The evolutionary dynamic of the strategies\_std (based on the utilities).

### **Wins**

The number of wins of each player.

### **Payoff differences**

The payoff differences for each player.

## Pairwise payoff differences

The difference of payoffs between pairs of players.

## Summary

Here is a file with the summary data.



#### **Ranked violin plot**

The mean utility of each player.

#### **Payoffs**

The pair wise utilities of each player.

#### **Evolutionary dynamics**

The evolutionary dynamic of the strategies (based on the utilities).

#### **Wins**

The number of wins of each player.

#### **Payoff differences**

The payoff differences for each player.

## Pairwise payoff differences

The difference of payoffs between pairs of players.

## Summary

Here is a file with summary data.

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## Probabilistic Ending Tournament

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### **Ranked violin plot**

The mean utility of each player.

### **Payoffs**

The pair wise utilities of each player.

### **Evolutionary dynamics**

The evolutionary dynamic of the strategies (based on the utilities).

### **Wins**

The number of wins of each player.

### **Payoff differences**

The payoff differences for each player.

## Pairwise payoff differences

The difference of payoffs between pairs of players.

## Match lengths

The length of the matches

## Summary

Here is a file with summary data.



## CHAPTER 4

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### Reproducing these results

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To reproduce these results:

```
python run_noisy.py
python run_std.py
python run_probend.py
```







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### Interaction data for tournaments

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Interaction data for the 3 tournaments (noisy, standard and probabilistic ending) is available in these files:

- strategies\_noisy\_interactions.csv
- strategies\_std\_interactions.csv
- strategies\_probend\_interactions.csv

They can be found at the following archive (with DOI number): <https://doi.org/10.5281/zenodo.808769>



## CHAPTER 6

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### Indices and tables

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- `genindex`
- `modindex`
- `search`