# An open reproducible framework for the study of the iterated prisoner's dilemma

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### 1 Introduction

- Review of the tournament itself; Original paper by Axelrod and Hamilton [1]. Some recent discussion of memory one strategies [2, 3].
- Discussion about open reproducible science (there are some reference around) (Python, git, github etc...)
- Overview of the library (what it can do, what has been done with it)
- Point at Sections 2 and 3.

## 2 Reproducing previous tournaments

## 3 New strategies and implications

## 4 Conclusion

### References

- [1] R. Axelrod and W. D. Hamilton. "The Evolution of Cooperation". In: *Science* 211 (1981), pp. 1390–1396. DOI: 10.1126/science.7466396 (cit. on p. 1).
- [2] W. H. Press and F. J. Dyson. "Iterated Prisoners Dilemma contains strategies that dominate any evolutionary opponent". In: Proceedings of the National Academy of Sciences 109.26 (2012), pp. 10409– 10413 (cit. on p. 1).
- [3] A. J. Stewart and J. B. Plotkin. "Extortion and cooperation in the prisoners dilemma". In: *Proceedings of the National Academy of Sciences* 109.26 (2012), pp. 10134–10135 (cit. on p. 1).