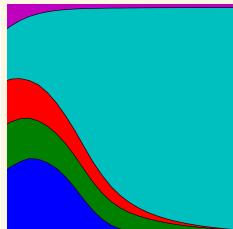
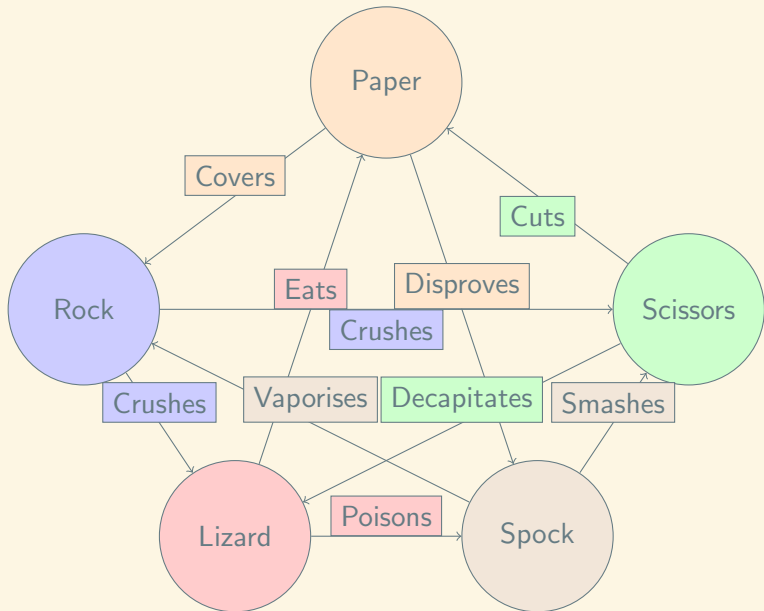


Vince: @drvinceknight





```
pip install nashpy
```

@kirstyjean (2 Jun 2017):

Me: sets up flawless heat competition trial, lizards will fight over hot podium, there can only be one winner!

Lizards:

#ALLizards2017

@kirstyjean (2 Jun 2017):

Me: sets up flawless heat competition trial, lizards will fight over hot podium, there can only be one winner!

Lizards:

#ALLizards2017



<https://www.youtube.com/watch?v=p3Uos2fzIJ0>

$$\begin{pmatrix} 3 & 0 \\ 5 & 1 \end{pmatrix}$$

$$\begin{pmatrix} 3 & 5 \\ 0 & 1 \end{pmatrix}$$



Robert Axelrod



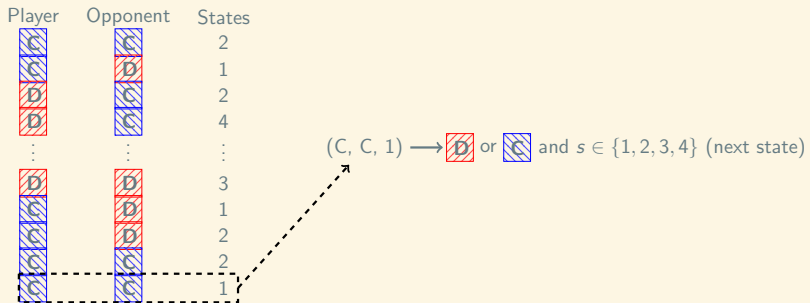
Robert Axelrod

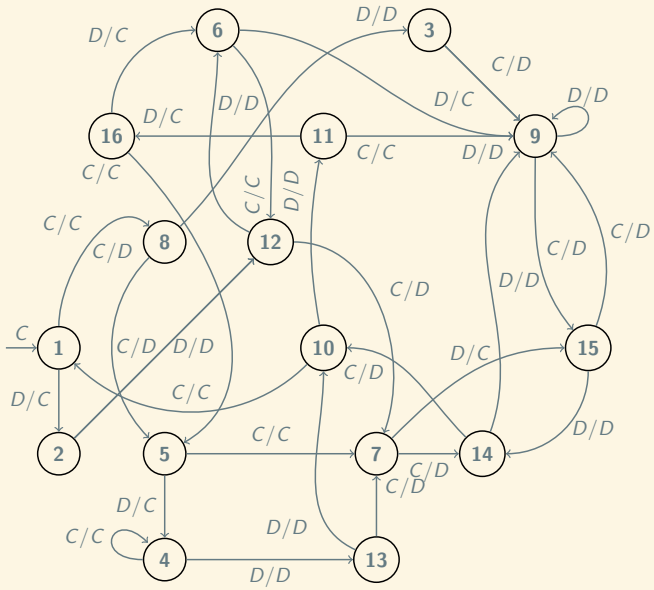
```
>>> import axelrod as axl

>>> players = (axl.TitForTat(),
...            axl.Cooperator())
>>> axl.Match(players, turns=5).play()
[(C, C), (C, C), (C, C), (C, C), (C, C)]

>>> players = (axl.TitForTat(),
...            axl.Defector())
>>> axl.Match(players, turns=5).play()
[(C, D), (D, D), (D, D), (D, D), (D, D)]

>>> players = (axl.TitForTat(),
...            axl.Alternator())
>>> axl.Match(players, turns=5).play()
[(C, C), (C, D), (D, C), (C, D), (D, C)]
```



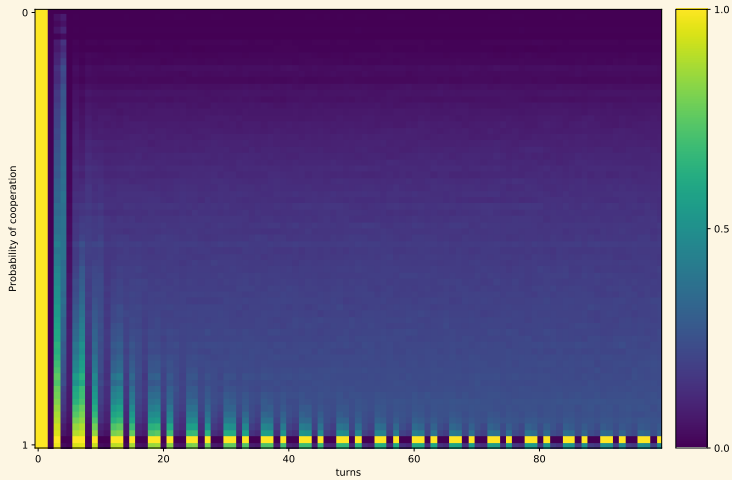


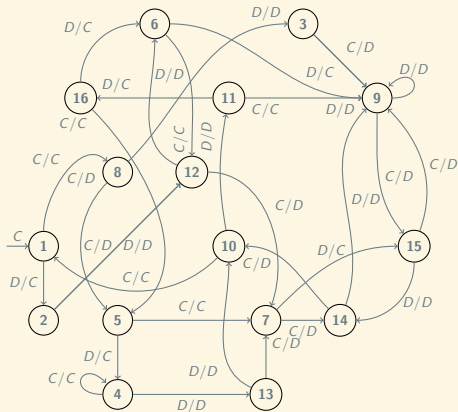
Invasion ($N = 14$)

	Player	Min	5th %	Mean	Median	95th %	M
1	Evolved FSM 16	0.000	0.0054	0.2096	0.079	0.7241	0.
2	PSO Gambler 2_2_2	0.000	0.0113	0.2042	0.079	0.5940	0.
3	EvolvedLookerUp2_2_2	0.000	0.0270	0.2014	0.079	0.6608	0.
4	Evolved ANN	0.002	0.0164	0.2014	0.079	0.5939	0.
5	Evolved ANN 5	0.002	0.0505	0.2004	0.079	0.5940	0.
6	Evolved HMM 5	0.000	0.0321	0.1972	0.079	0.5940	0.
7	PSO Gambler 1_1_1	0.001	0.0455	0.1955	0.079	0.6150	0.
8	Fool Me Once	0.002	0.0058	0.1955	0.079	0.5940	0.
9	Evolved FSM 16 Noise 05	0.003	0.0607	0.1943	0.079	0.5930	0.
10	PSO Gambler Mem1	0.000	0.0517	0.1920	0.079	0.6118	0.
11	Evolved FSM 4	0.000	0.0000	0.1918	0.079	0.5930	0.
12	Meta Hunter	0.000	0.0049	0.1869	0.079	0.5883	0.
13	Evolved ANN 5 Noise 05	0.001	0.0303	0.1858	0.079	0.5930	0.
14	Omega TFT	0.003	0.0704	0.1849	0.079	0.5939	0.
15	Fortress4	0.000	0.0000	0.1848	0.066	0.5919	0.
16	TF3	0.002	0.0041	0.1846	0.079	0.6190	0.

Resistance ($N = 14$)

	Player	Min	5th %	Mean	Median	95th %	Max	Std
1	CS	0.921	0.9970	0.9984	1.000	1.0	1.0	0.0062
2	TF1	0.938	0.9950	0.9973	0.999	1.0	1.0	0.0069
3	TF2	0.925	0.9820	0.9949	0.996	1.0	1.0	0.0104
4	Predator	0.836	0.9912	0.9941	0.999	1.0	1.0	0.0212
5	Prober 4	0.895	0.9110	0.9863	0.996	1.0	1.0	0.0250
6	Handshake	0.514	0.9131	0.9812	0.999	1.0	1.0	0.0743
7	Winner21	0.921	0.9210	0.9778	0.996	1.0	1.0	0.0310
8	Hard Prober	0.916	0.9160	0.9731	0.995	1.0	1.0	0.0327
9	Fortress4	0.929	0.9290	0.9726	0.981	1.0	1.0	0.0287
10	Ripoff	0.919	0.9190	0.9669	0.978	1.0	1.0	0.0318
11	Tester	0.919	0.9190	0.9662	0.977	1.0	1.0	0.0320
12	Grudger	0.921	0.9210	0.9592	0.921	1.0	1.0	0.0390
13	TF3	0.921	0.9210	0.9589	0.921	1.0	1.0	0.0388
14	Davis	0.921	0.9210	0.9588	0.921	1.0	1.0	0.0387
15	Retaliate 3	0.921	0.9210	0.9580	0.921	1.0	1.0	0.0383
16	Retaliate	0.921	0.9210	0.9576	0.921	1.0	1.0	0.0382





TF1 #1	TF1 #2
1: C	1: C
8: C	8: C
5: D	5: D
4: C	4: C
4: C	4: C
4: C	4: C
4: C	4: C
4: C	4: C

164

~~164~~ 211+

Julie Rymer - @Chadys - (10 May 2017):

And I really wanted to thank you all, I discovered your project because of a course where we needed to participate in an open source project, and I had the occasion to compare the welcome me and my coworkers received here compared to other people from my class who worked on different project. And I've got to said you are awesome on that part and on the help your provide to newbies I like your project so I'll try to continue to contribute now and then !

- ▶ @NikoletaGlyn
- ▶ @opcampbell
- ▶ marcharper.codes
- ▶ github.com/Axelrod-Python/Axelrod
- ▶ gitter.im/Axelrod-Python/Axelrod
- ▶ arxiv.org/abs/1707.06920

@drvinceknight

- ▶ vknight.org/gt/
- ▶ github.com/drvinceknight/Nashpy