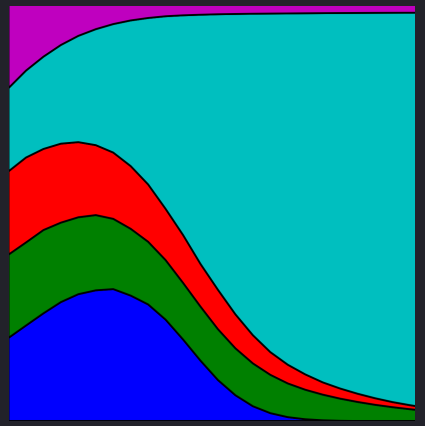
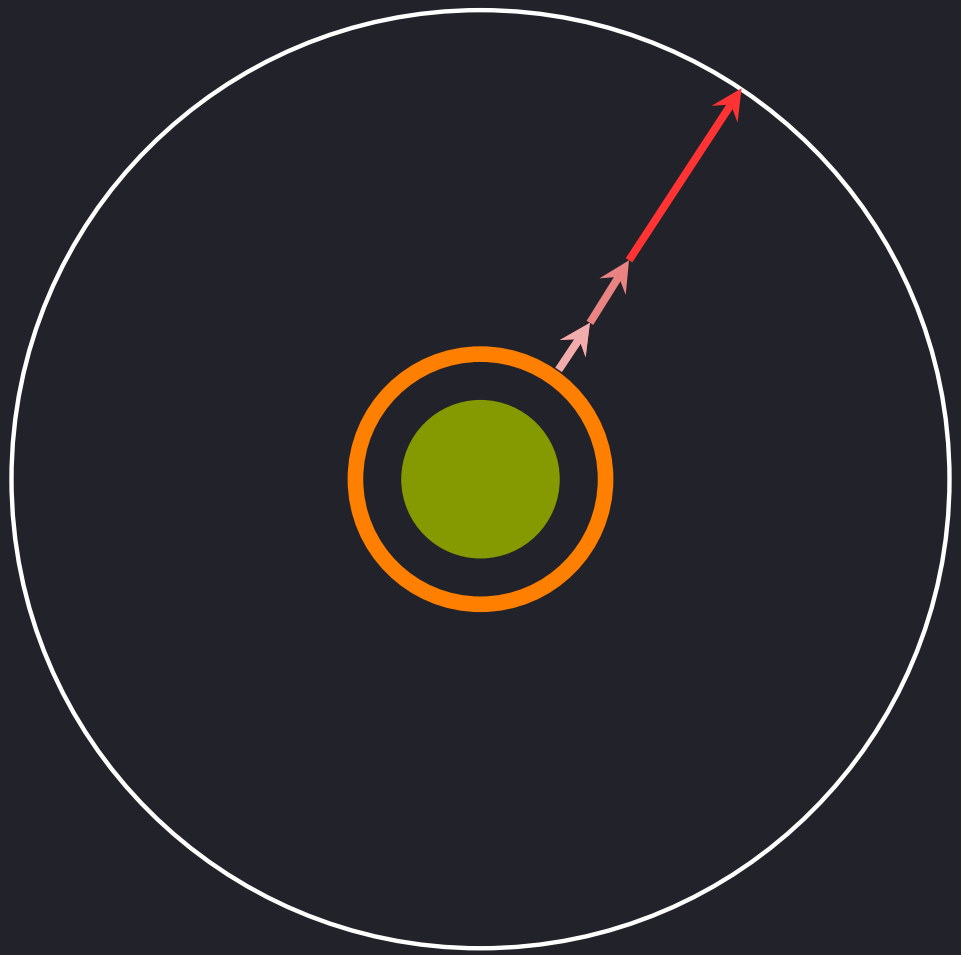
A bibliometric study of a research field

PyData UK

@NikoletaGlyn



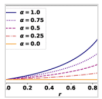
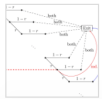
Software
Sustainability
Institute



http://matt.might.net/articles/phd-school-in-pictures/

Outline

Figures (7)


ELSEVIER

Ecological Modelling
Volume 389, 10 December 2018, Pages 33-40

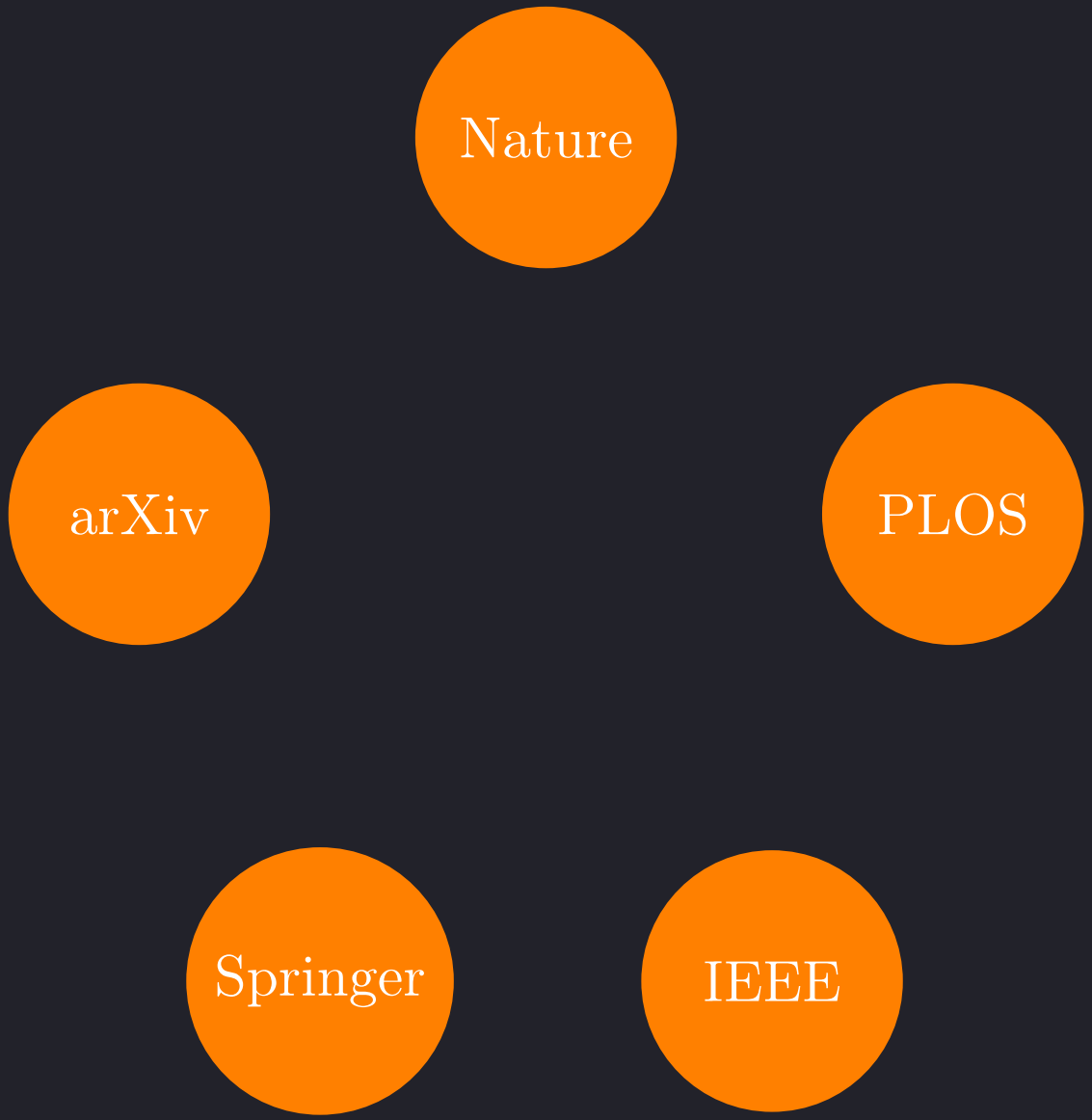
An evolutionary game theoretic model of rhino horn devaluation

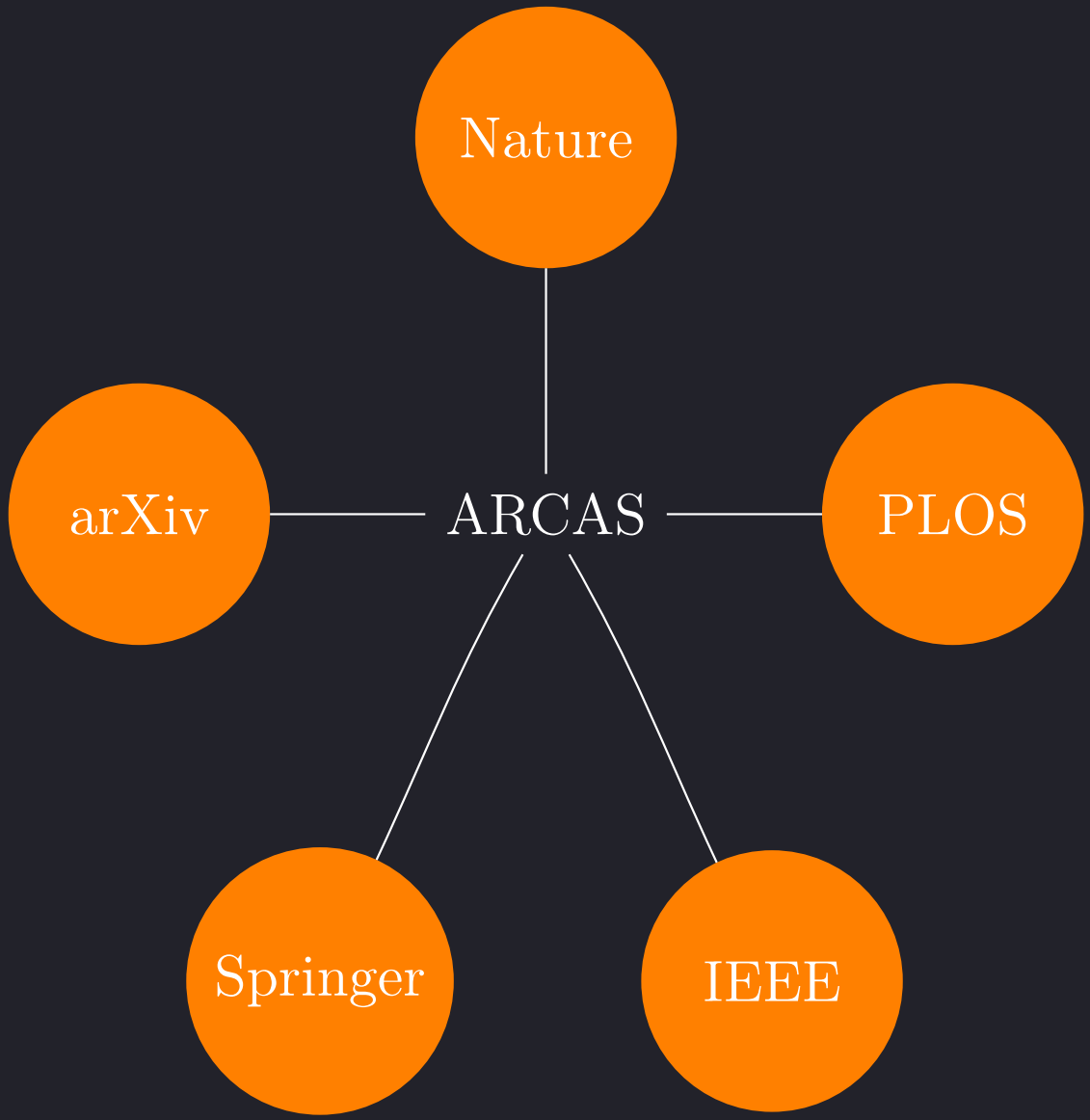
Nikoleta E. Glynatsi, Vincent Knight, Tamsin E. Lee

https://doi.org/10.1016/j.ecolmodel.2018.10.003

Abstract

Rhino populations are at a critical level due to the demand for rhino horn and the subsequent poaching. Wildlife managers attempt to secure rhinos with approaches to devalue the horn, the most common of which is dehorning. Game theory has been used to examine the interaction of poachers and wildlife managers where a manager can either 'dehorn' their rhinos or leave the horn attached and poachers may behave 'selectively' or 'indiscriminately'. The approach described in this paper


Nature
arXiv
PLOS
Springer
IEEE


Nature
arXiv
ARCAS
PLOS
Springer
IEEE

```
>>> import arcas
>>> plos = arcas.Plos()
>>> parameters = plos.parameters_fix(title="Game", abstract="Game", records=1, start=1)
>>> url = plos.create_url_search(parameters)
>>> url
'http://api.plos.org/search?q=title:"Game"+AND+abstract:"Game"&rows=1&start=1'
```

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>>> import arcas
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>>> url
'http://api.plos.org/search?q=title:"Game"+AND+abstract:"Game"&rows=1&start=1'
```

```
>>> request = plos.make_request(url)
>>> root = plos.get_root(request)
>>> plos_article = plos.parse(root)
[{'id': '10.1371/journal.pone.0058546',
  'journal': 'PLoS ONE',
  'eissn': '1932-6203',
  'publication_date': '2013-03-13T00:00:00Z',
  'article_type': 'Research Article',
  'author_display': ['Adam C. Oei', 'Michael D. Patterson'],
  'abstract': ['Background: Previous evidence points to ...'],
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  'score': 20.51807}]
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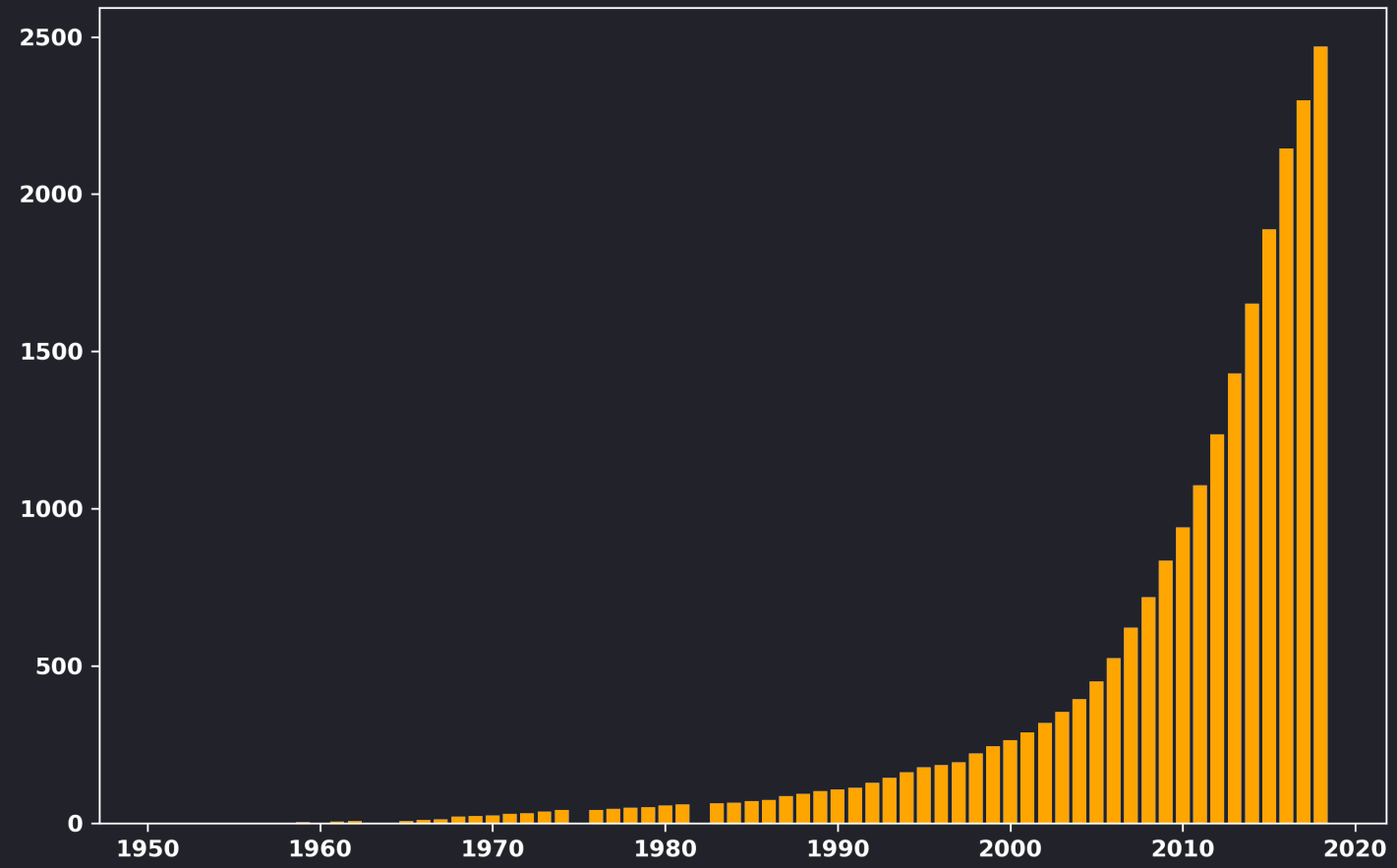
title="prisoner's dilemma" OR abstract="prisoner's dilemma"



What do people write about on field of the Prisoner's Dilemma?

Latent Dirichlet allocation

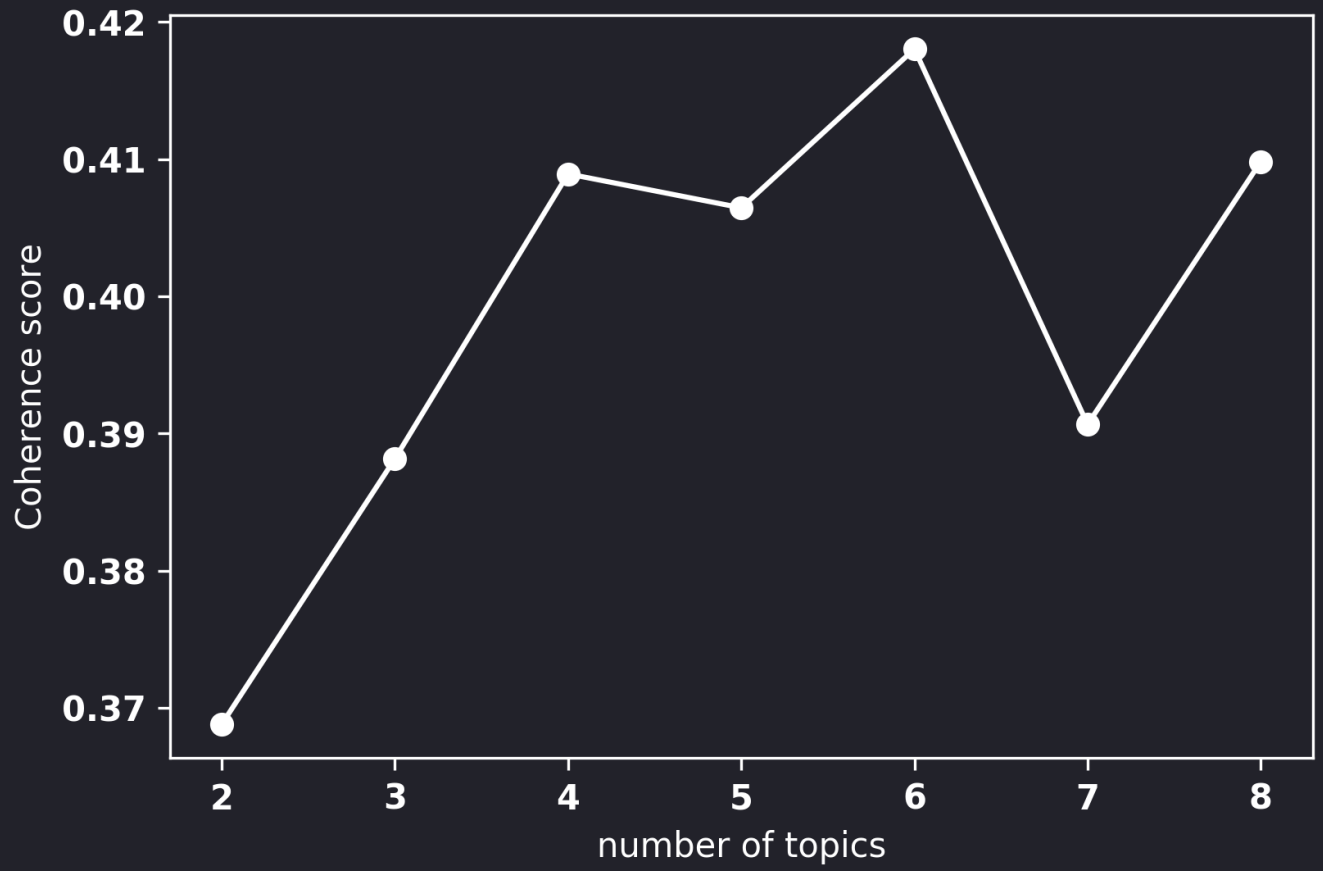
	Topic 1	Topic 2
"game"	0.200	0.220
"agent"	0.009	0.008
"network"	0.011	0.012
"strategy"	0.007	0.028
"population"	-	0.008
"social"	0.010	-

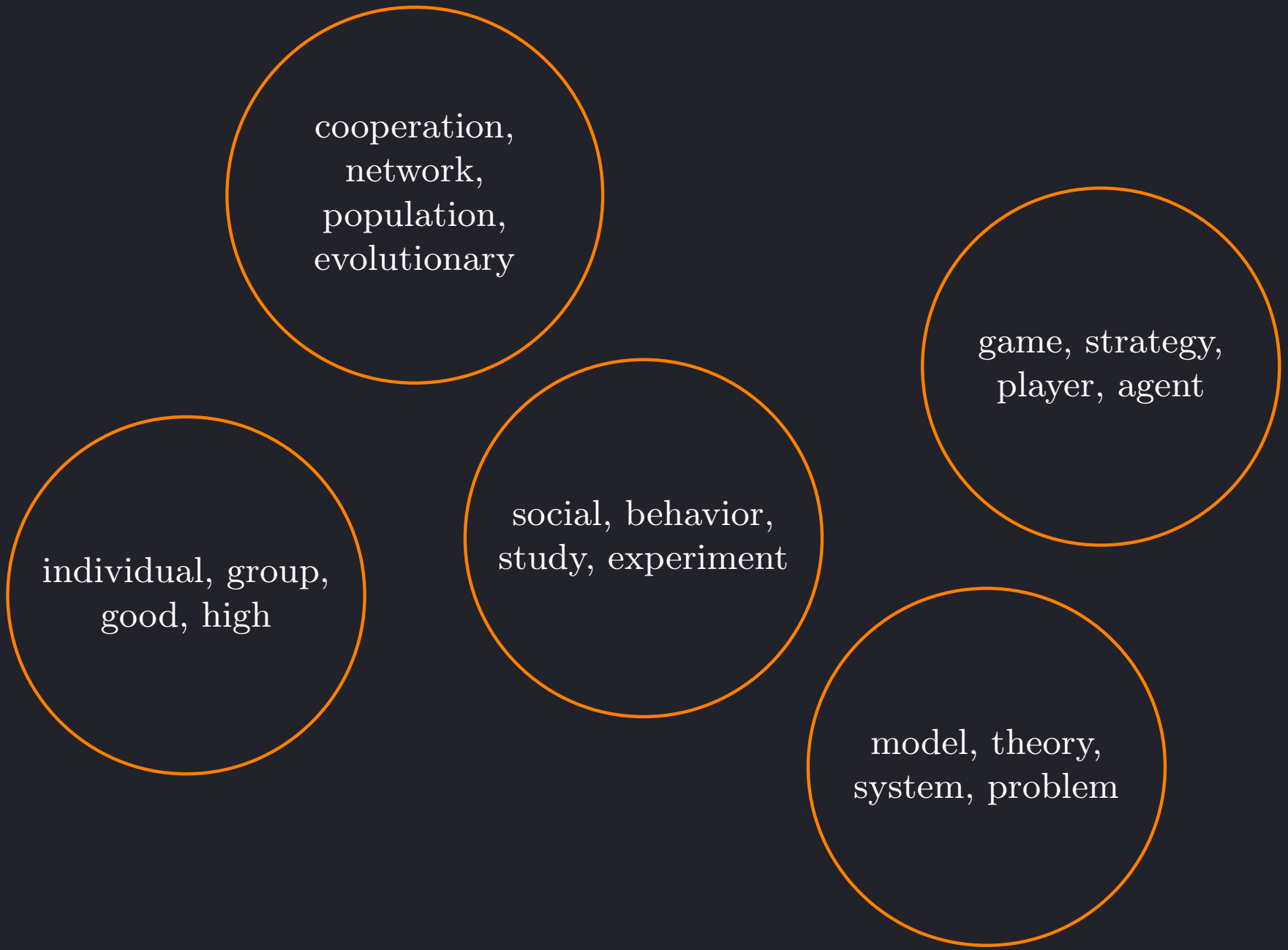
abstract = “The social network of agents”

abstract = “The social network of agents”

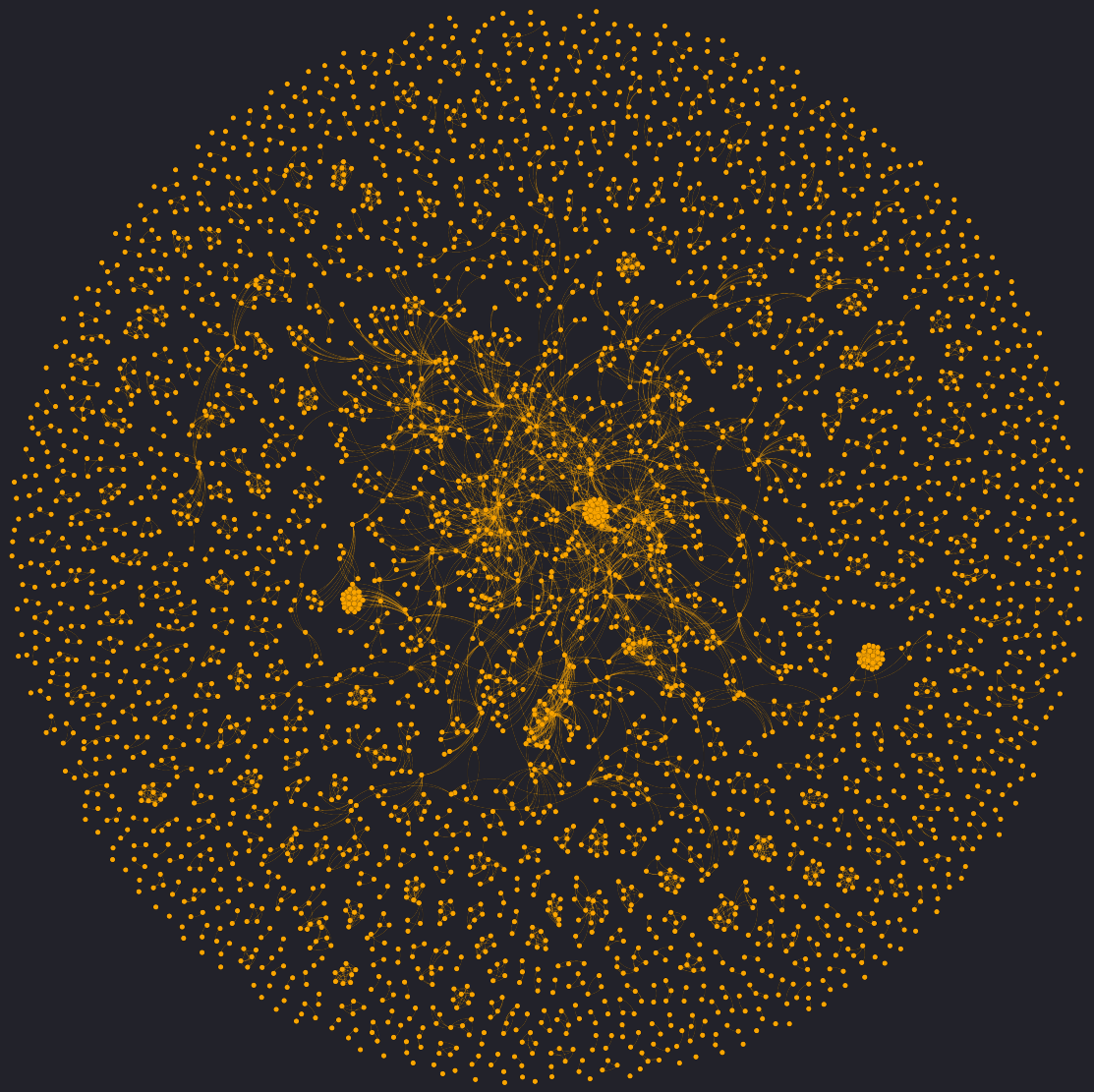
$$c^1 = 0.009 + 0.011 + 0.010 = 0.30$$
$$c^2 = 0.008 + 0.012 = 0.20$$

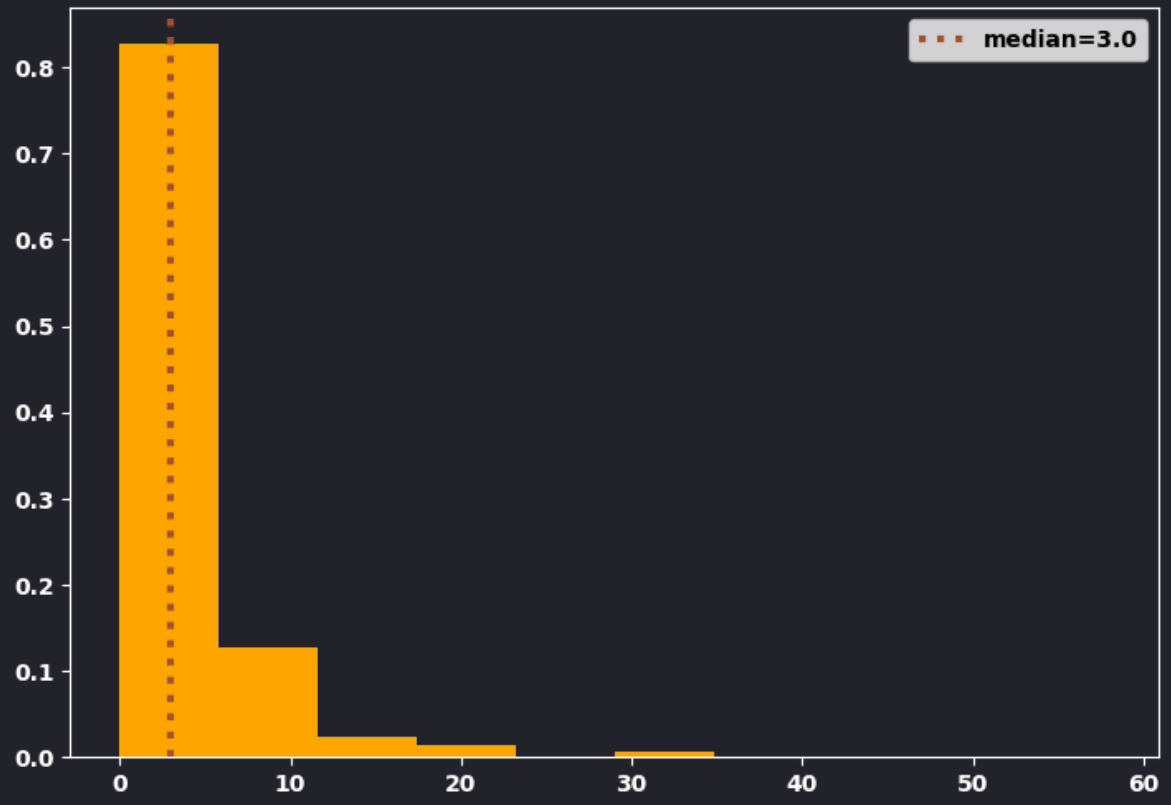
$\longrightarrow [0.3, 0.2]$


0.42
0.41
0.40
0.39
0.38
0.37
Coherence score
2
3
4
5
6
7
8
number of topics


cooperation, network, population, evolutionary
game, strategy, player, agent
social, behavior, study, experiment
individual, group, good, high
model, theory, system, problem

Is the Prisoner's Dilemma a collaborative field?




median=3.0
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0
10
20
30
40
50
60

“A bibliometric study of research topics, collaboration and influence in the field of the Iterated Prisoner’s Dilemma"

Nikoleta E. Glynatsi, Vincent A. Knight

https://arxiv.org/abs/1911.06128

@NikoletaGlyn

@drvinceknight

- https://nikoleta-v3.github.io
- https://arxiv.org/abs/1911.06128

https://github.com/Nikoleta-v3/bibliometric-study-of-the-prisoners-dilemma

https://github.com/ArcasProject/Arcas

- https://nikoleta-v3.github.io/2019/06/women-publications-in-mathematics.html
- http://iltabiai.github.io