The impact of daily practices

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OCTOBER 20, 2015

Not about:

- When to drink your coffee
- How to get things done
- How to stop procrastinating
- Etc.

Procrastination

Ideally:

$$\text{Procrastination} \propto \frac{1}{\text{How much stuff you have to do}}$$

In reality:

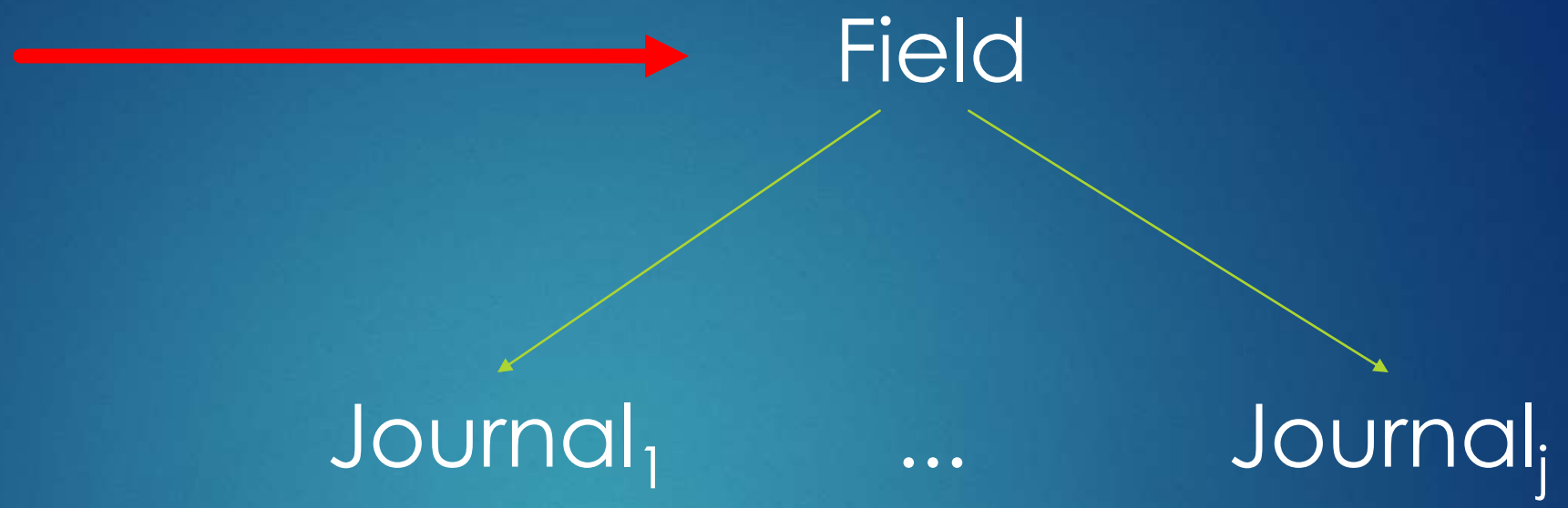
$$\text{Procrastination} \propto \text{How much stuff you have to do}$$

JORGE CHAM © 2010

Is about:

- Impact Factors are the worst
- Gaming the citation system
- Copyright of your papers

IF ≡ # citations / # research articles
(Per journal)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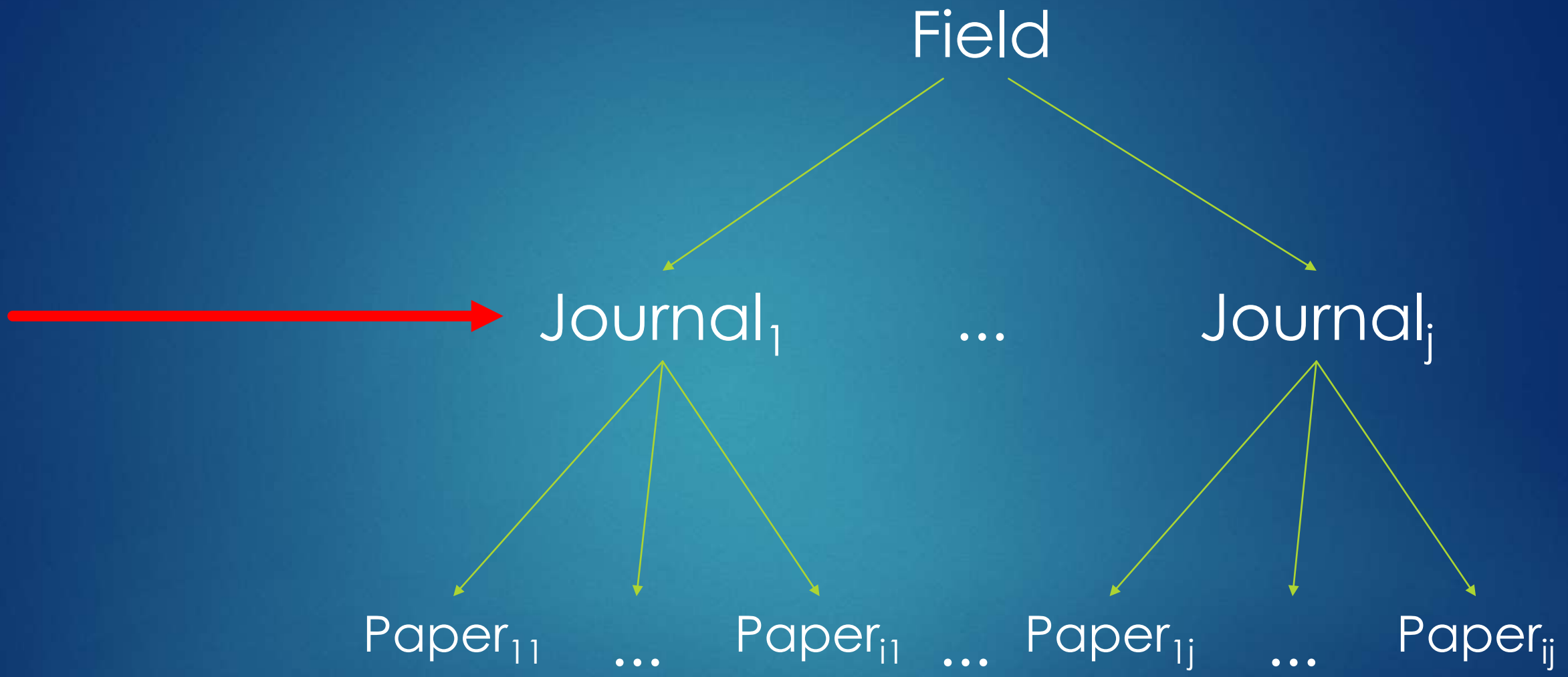
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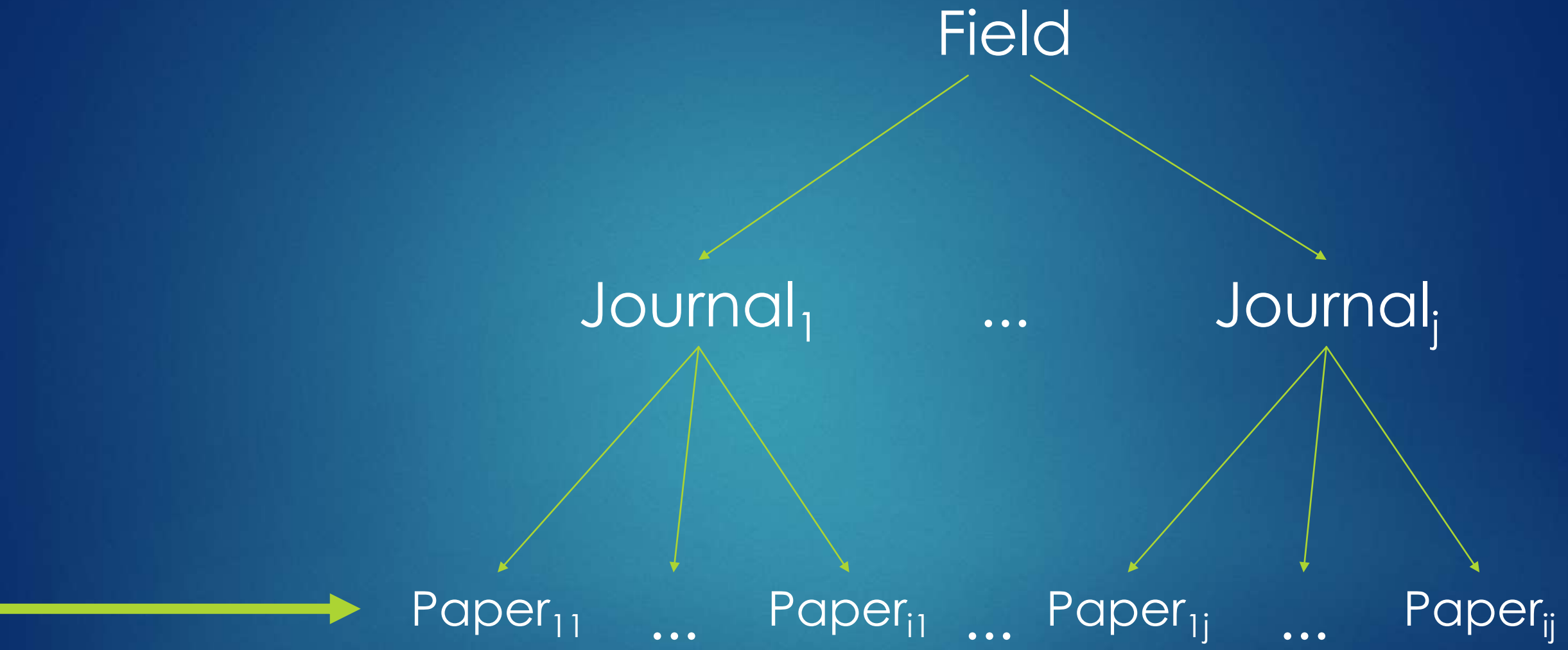
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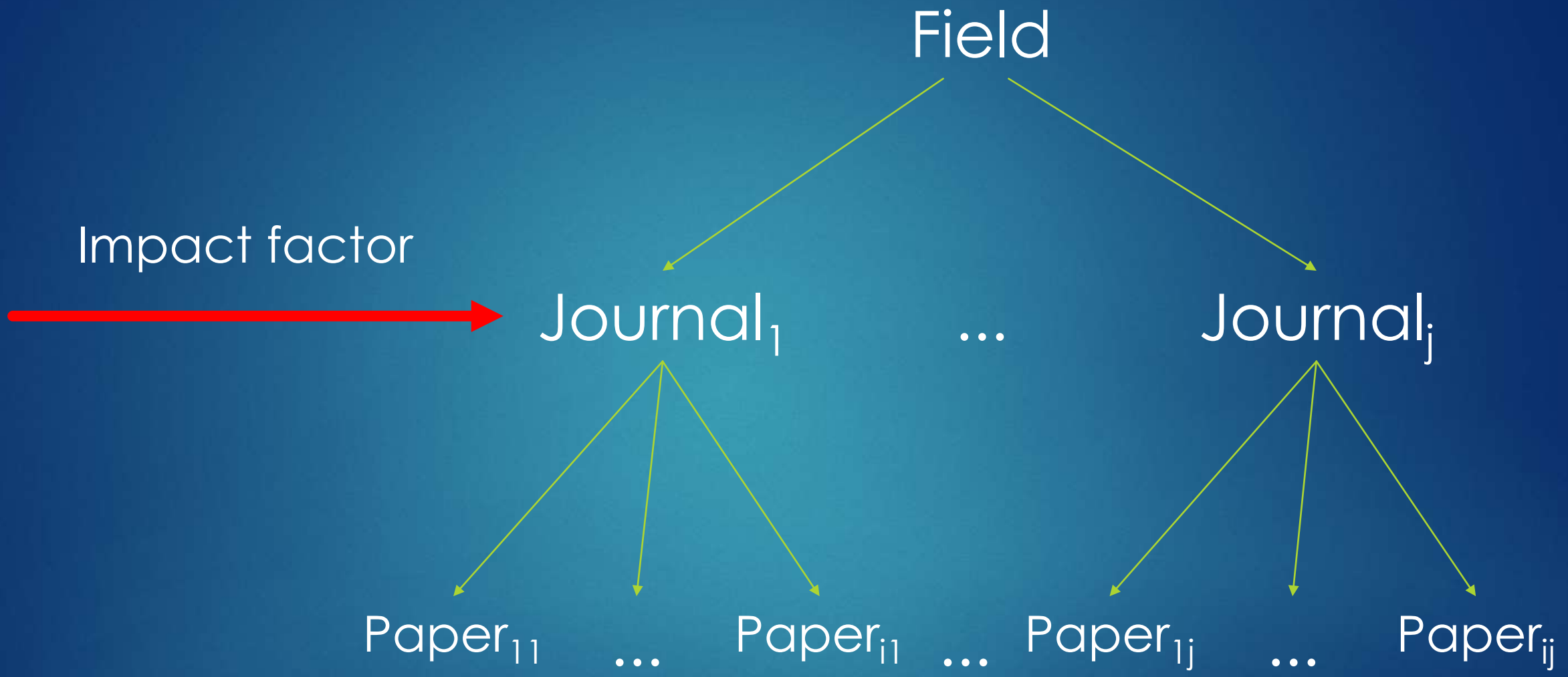
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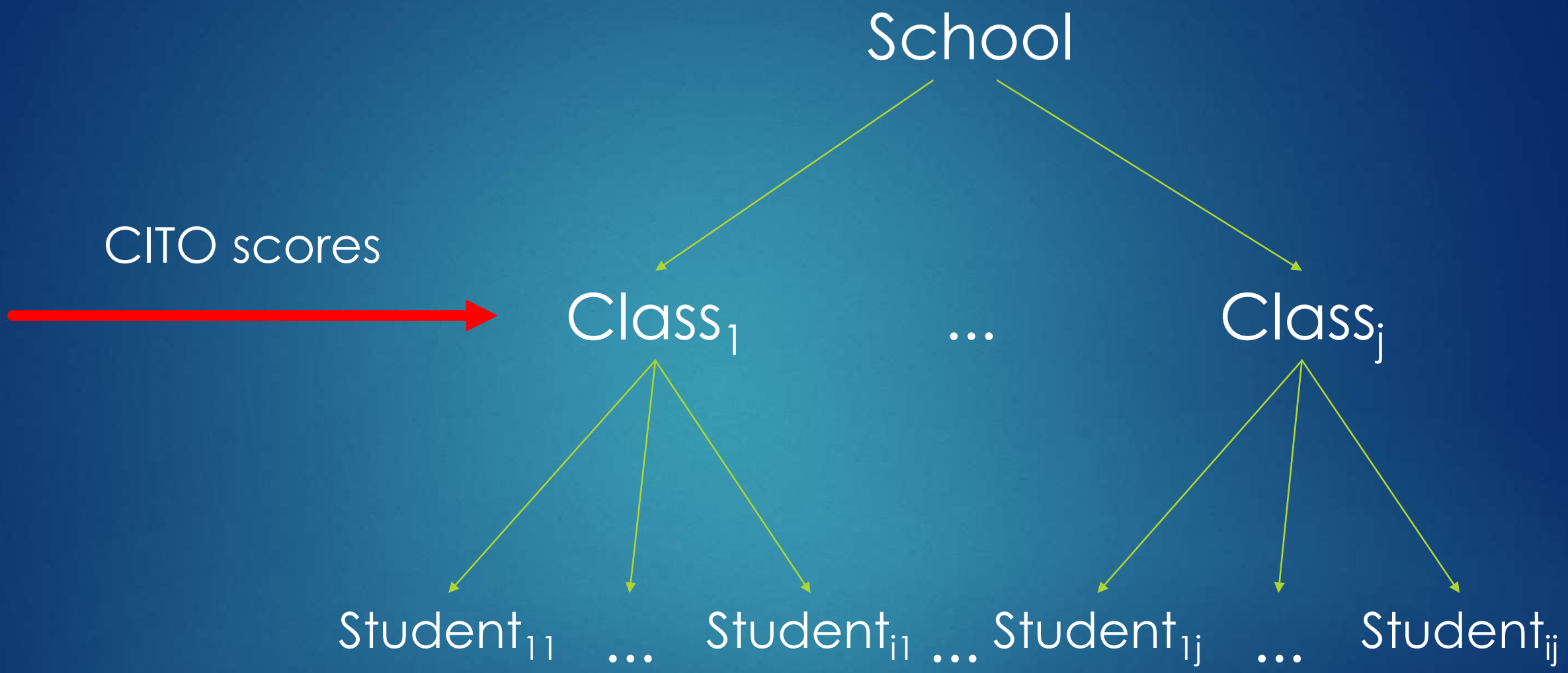
School
CITO scores
Class$_1$
...
Class$_j$
Student$_{11}$
...
Student$_{i1}$
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Student$_{1j}$
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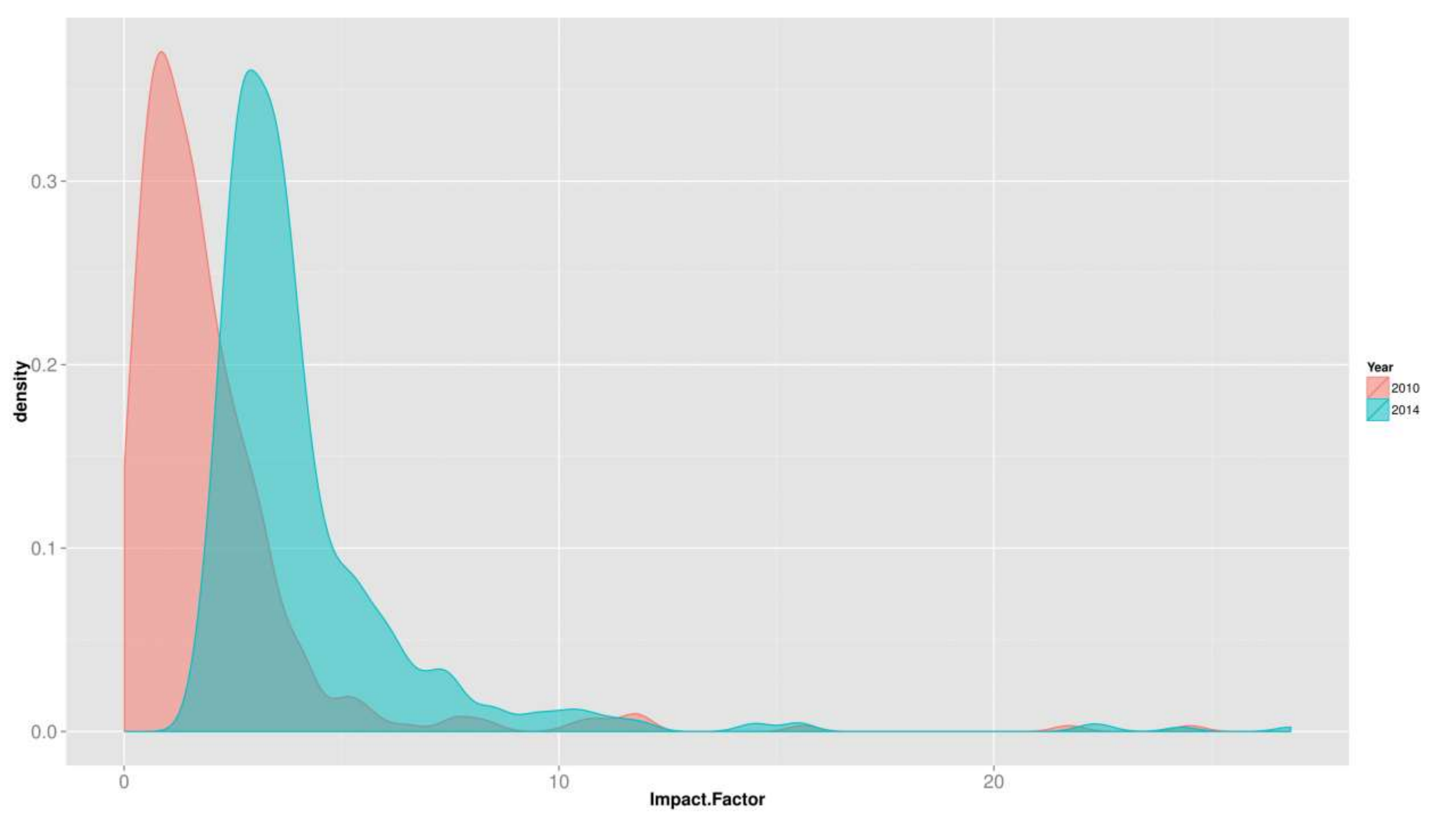
Gaming the IF:

- Delay the official publication (backlogs!)
- Less research articles, more opinion, editorials, etc.


density
0.3
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10
20
Impact.Factor
Year
2010
2014

IF = Artificial + ecological fallacy

"The use of journal impacts in evaluating individuals has its inherent dangers."

---Eugene Garfield, 2006, JAMA, p.92

IF = Artificial ~~+ ecological~~ ~~fallacy~~

H-index = H papers with at least H citations

H = 20 → 20 papers with ≥20 citations

$$\frac{\text{\# times your work is cited} - \text{\# citations that actually trash your work} - \text{\# times you cited yourself (nice try)} - \text{\# times you were cited just to pad the introduction section} - \text{\# citations the editor pressured the author to include to increase the journal's impact factor}}{\text{\# original articles you've written} + \text{\# articles you were included in out of pity or politics} + \text{\# not-so-original articles you've ~~written~~ copied and pasted}}$$

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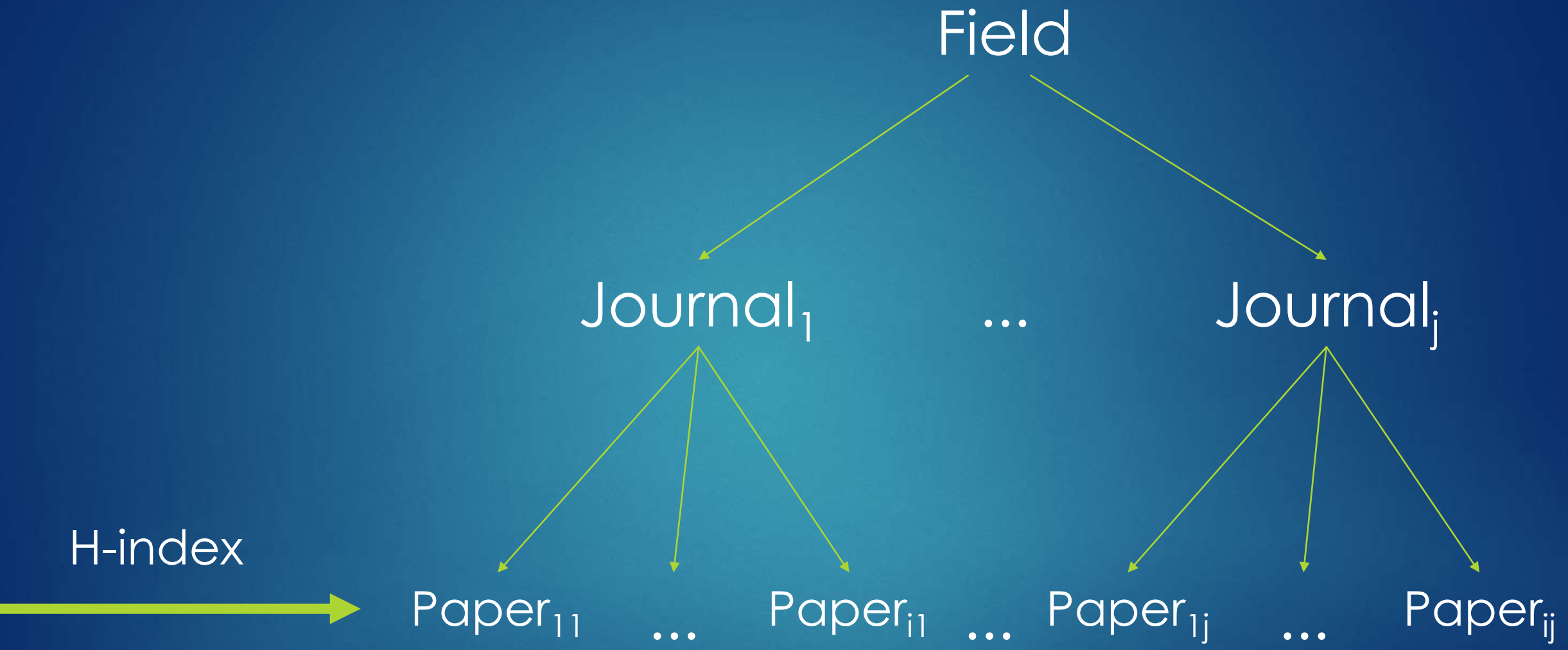
H-index lacks predictive validity

H-index predicts… h-index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H-index
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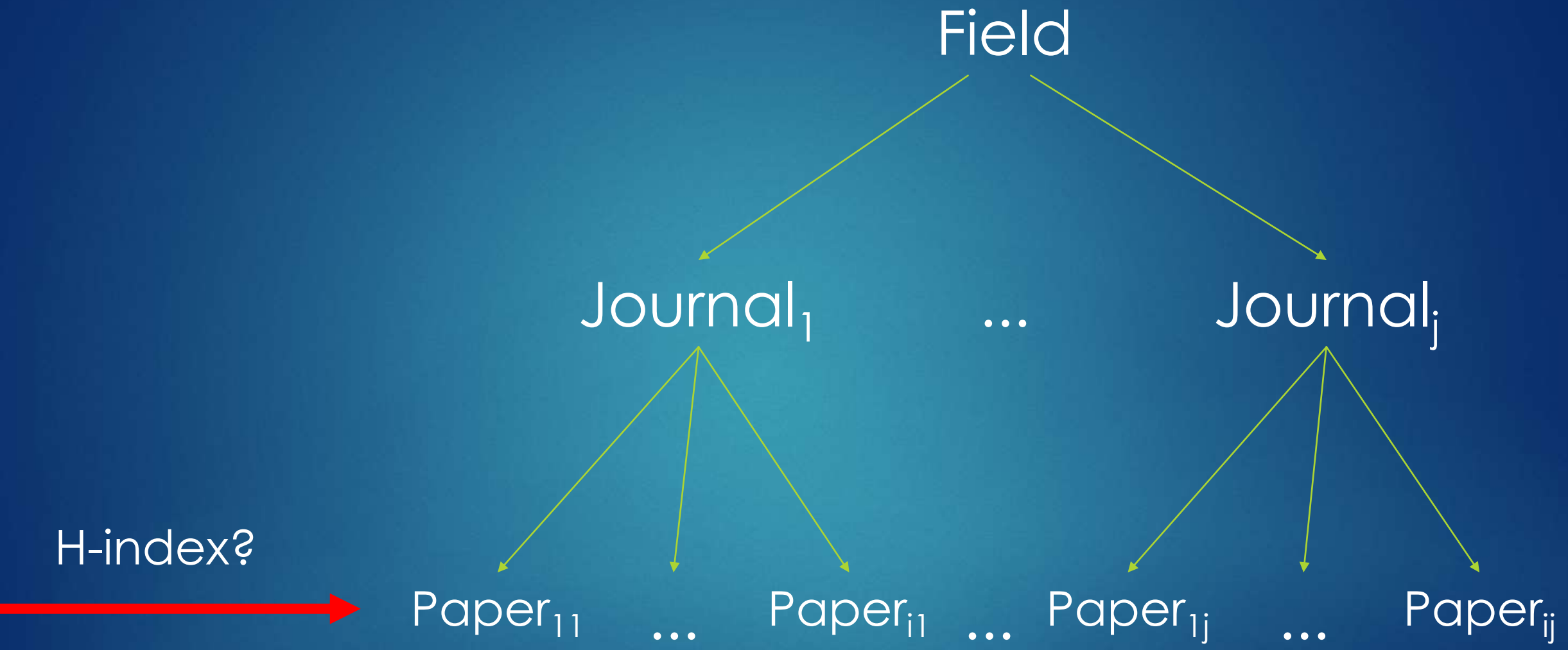
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H-index?
Paper$_{11}$
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Paper$_{i1}$
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And yet:

MERIT principle for evaluating quality

And yet:

- IMPACT FACTOR ☹
- Quantity
- Contents
- Only publications
- [implies citations]

"Quality is the fundament of our [...] research"

---Strategic Plan 2014-2017 TSB, p.4

"QUALITY"
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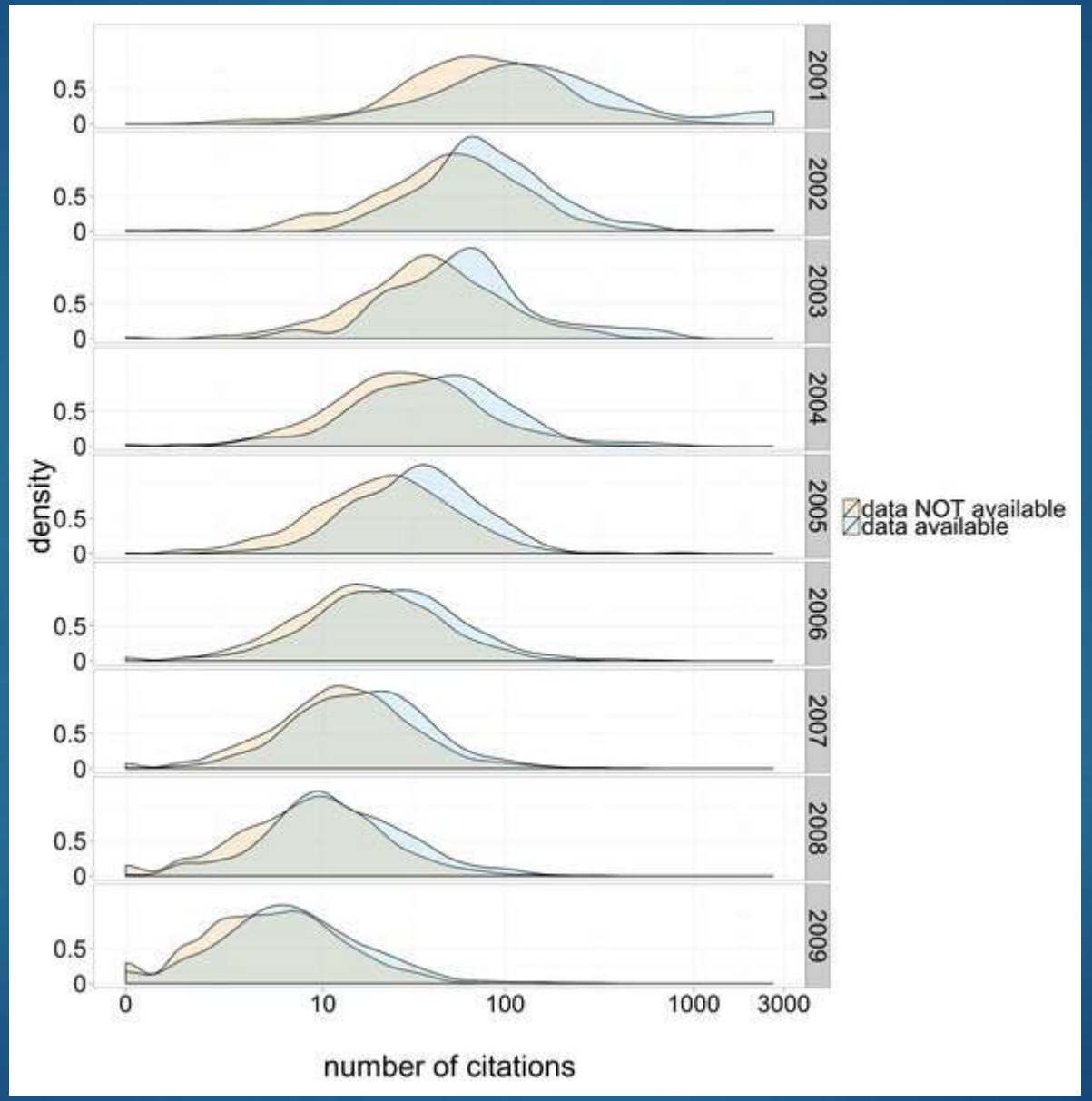
Gaming your citation score:

- Share your data



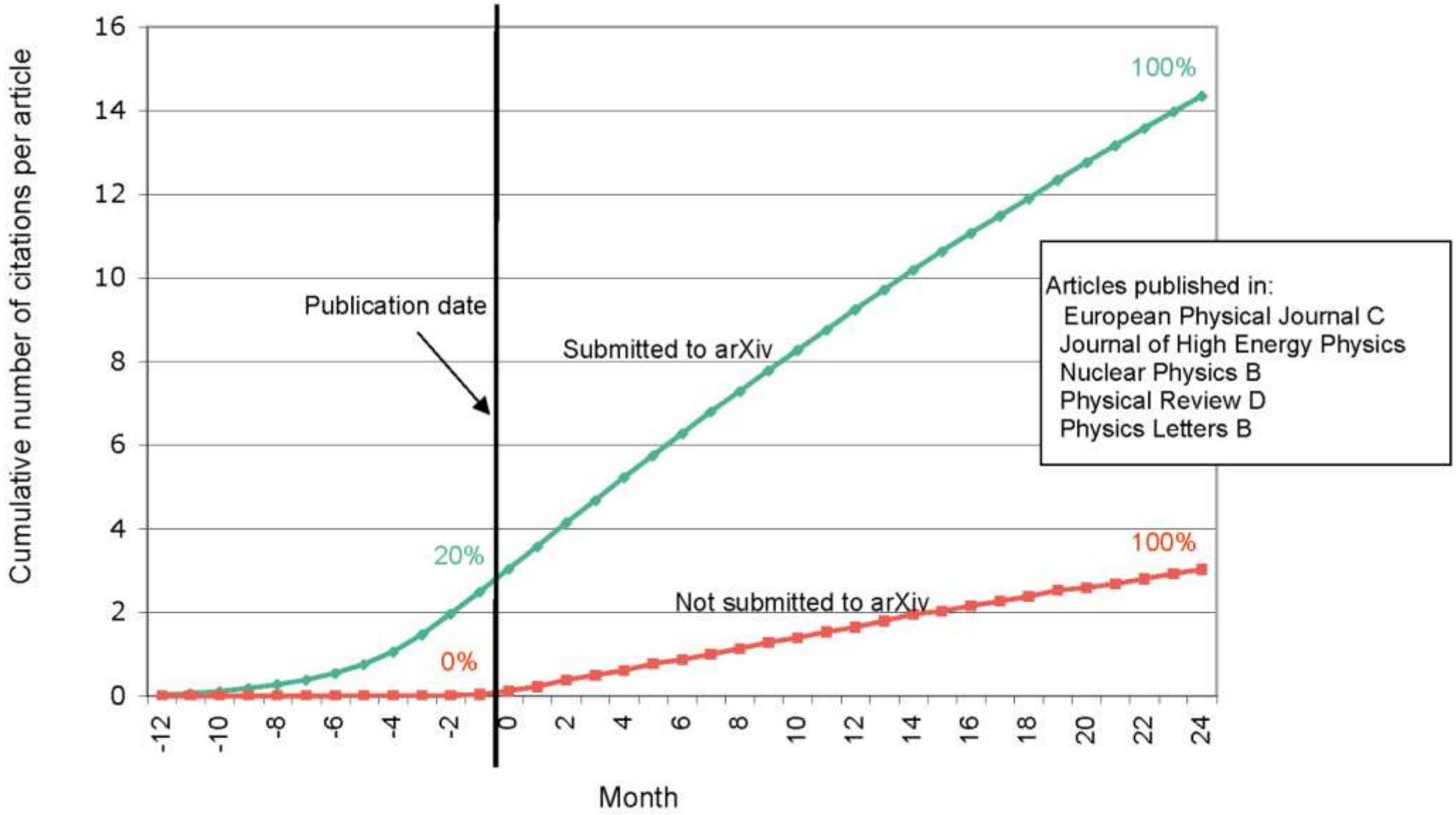
Piwowar and co (2013) in PeerJ

Gaming your citation score:

- Share your data
- Speed up the publication (preprint!)

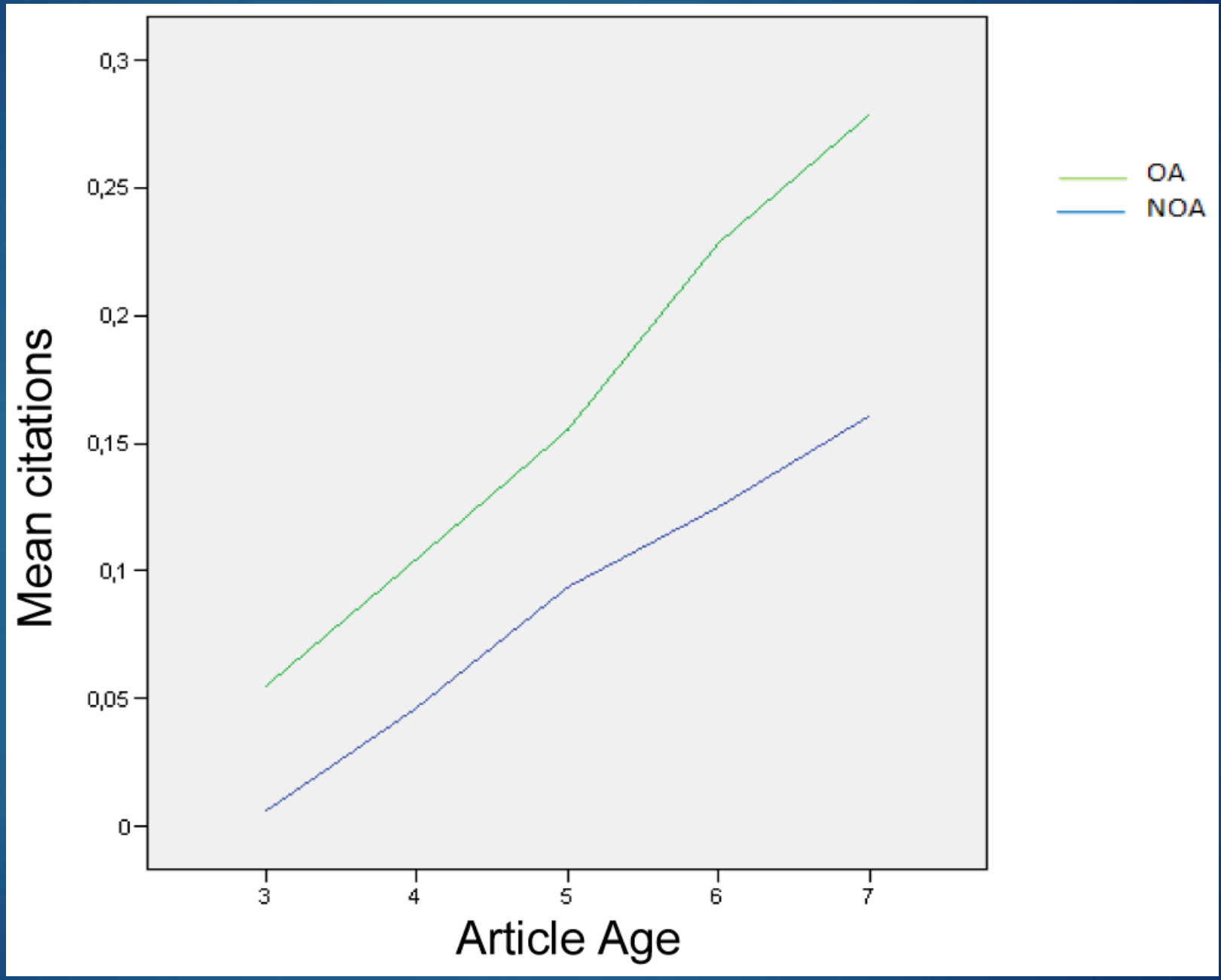
Chris Hartgerink @chartgerink
Submitted by @michelenuijten "The Prevalence of Statistical Reporting Errors in Psychology (1985-2013)".
Preprint @ bit.ly/1yr2ZpF
Retweet Details
7 retweeters have a total of 4,269 followers

arxiv:0906.5418
Gentil-Beccot, Mele, Brooks



Gaming your citation score:

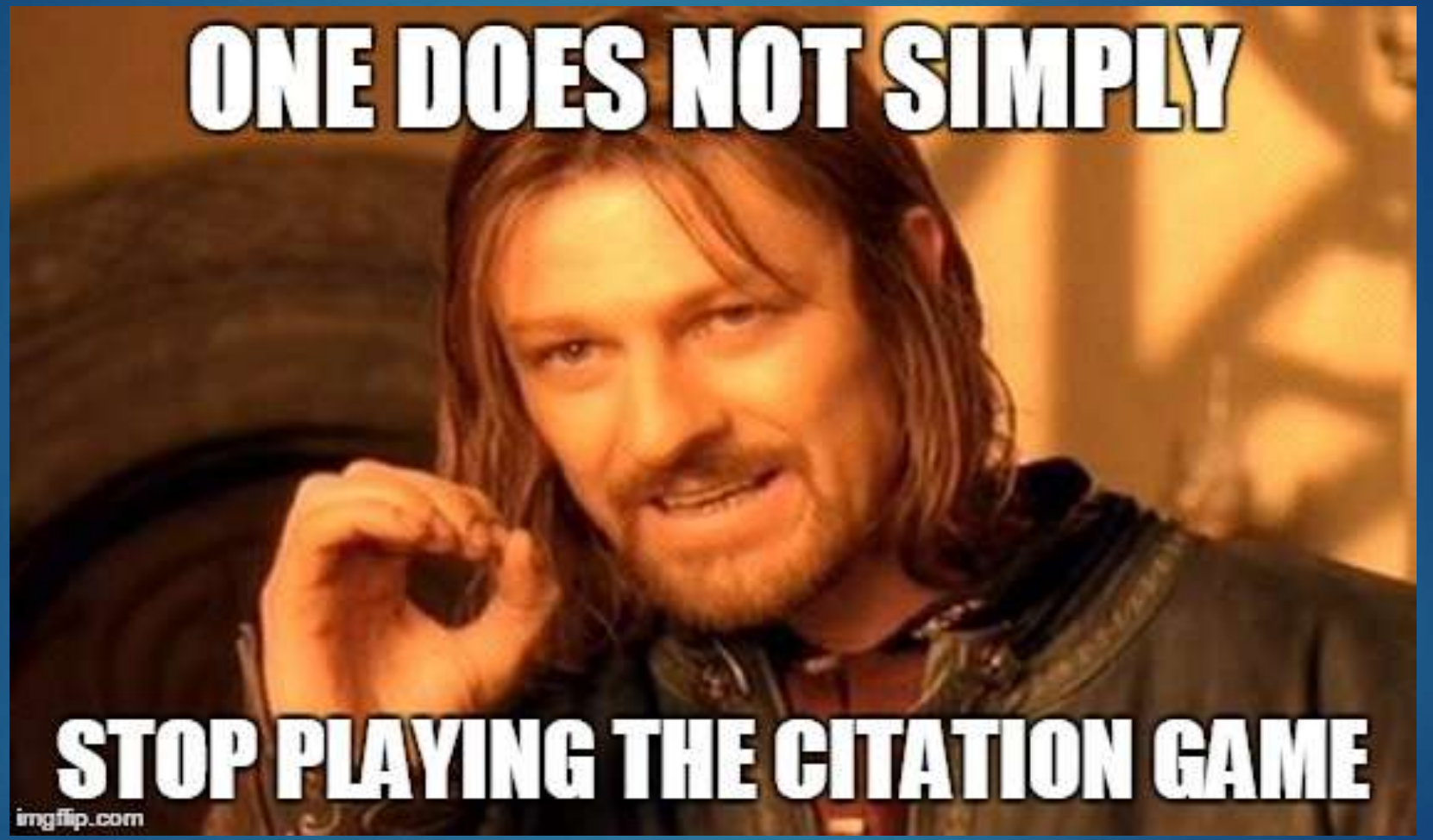
- Share your data
- Speed up the publication (preprints)
- Publish Open Access



Gargouri and co (2010) in PLOS ONE

Minor changes daily practice $\propto$ benefits

Still play the old citation game


ONE DOES NOT SIMPLY
STOP PLAYING THE CITATION GAME
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Suggestions good anyway

- Share your data
- Speed up the publication (preprints)
- Publish Open Access

Because they focus on actual research!

not all
That's Folks!

- Share your data
- Speed up the publication (preprints)
- Publish Open Access

- Invite re-use and credit for data
- Improve work with more feedback
- Retain your creative rights

License agreement (traditional)

- Signs away ownership
- “Barrier” to publishing
- Does not enable researcher’s rights
- Prevents impact of research

Ebola example

- Liberia outbreak large surprise
- Killed >11,000 people
- Now “under control”

The broad age distribution of persons tested and the wide range of antibody titres observed for the activity of the three viruses suggest that the respective diseases probably occur more frequently in single cases rather than in occasional nosocomial or local epidemics.

Considering that active cases of Ebola or Marburg virus disease have never been reported from Liberia, the occurrence of these specific antibodies was surprising. The results seem to indicate that Liberia has to be included in the Ebola and Marburg virus endemic zone. Therefore, the medical personnel in Liberian health centres should be aware of the possibility that they may come across active cases and thus be prepared to avoid nosocomial epidemics.

1982(!)

●○○○○ KPN NL 4G 16:37 76%
sciencedirect.com
ScienceDirect

Annales de l'Institut Pasteur / Virologie
1982, Vol.133(2):125–128, doi:10.1016/S07…

A serological survey on viral haemorrhagic fevers in liberia *

J. Knobloch, E.J. Albiez, H. Schmitz

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You gotta fight for the right to access papers

License agreement (new and open)

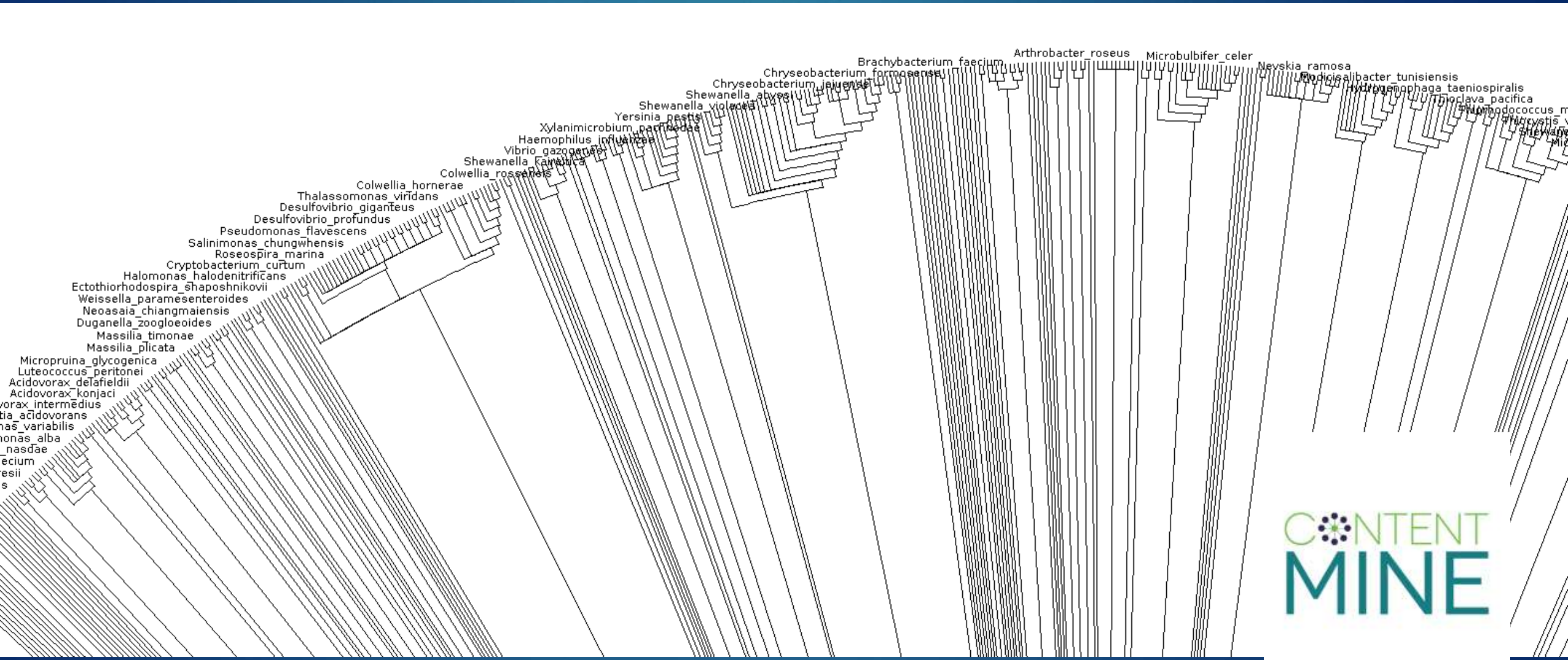
- CC-BY (by attribution)
- CC-0 (public domain)
- Author retains rights
- More access, more potential impact.
- Allows new research

The right to read is the right to mine

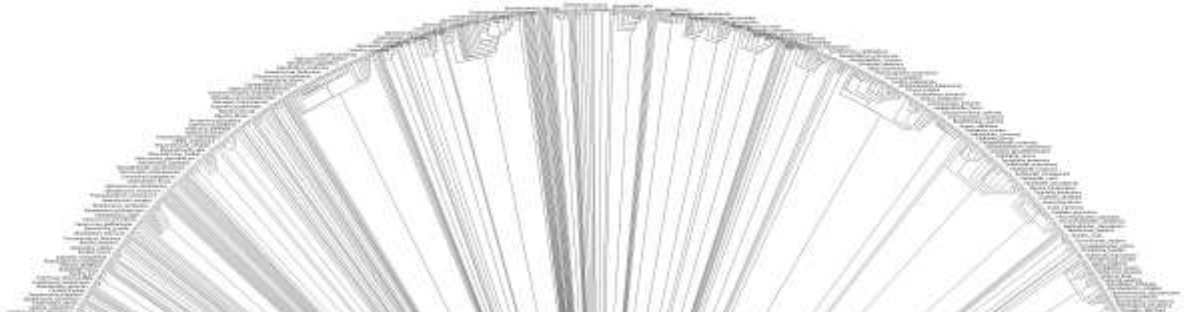
- Individual research papers contain trove of information
- But also systematic aspects across papers, worth investigating
- Old license agreements harm this kind of meta-research (many more restrictions)
- Open license agreements encourage meta-research (lift restrictions)

CONTENT MINE

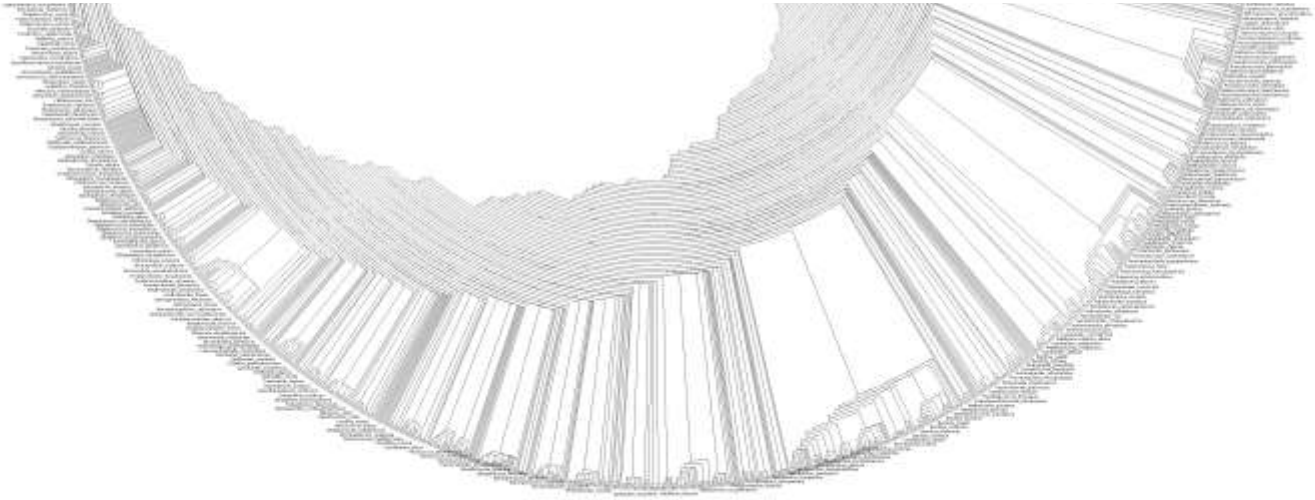
The right to read is the right to mine



CONTENT MINE



Automated procedure based on published, Open Access research papers!

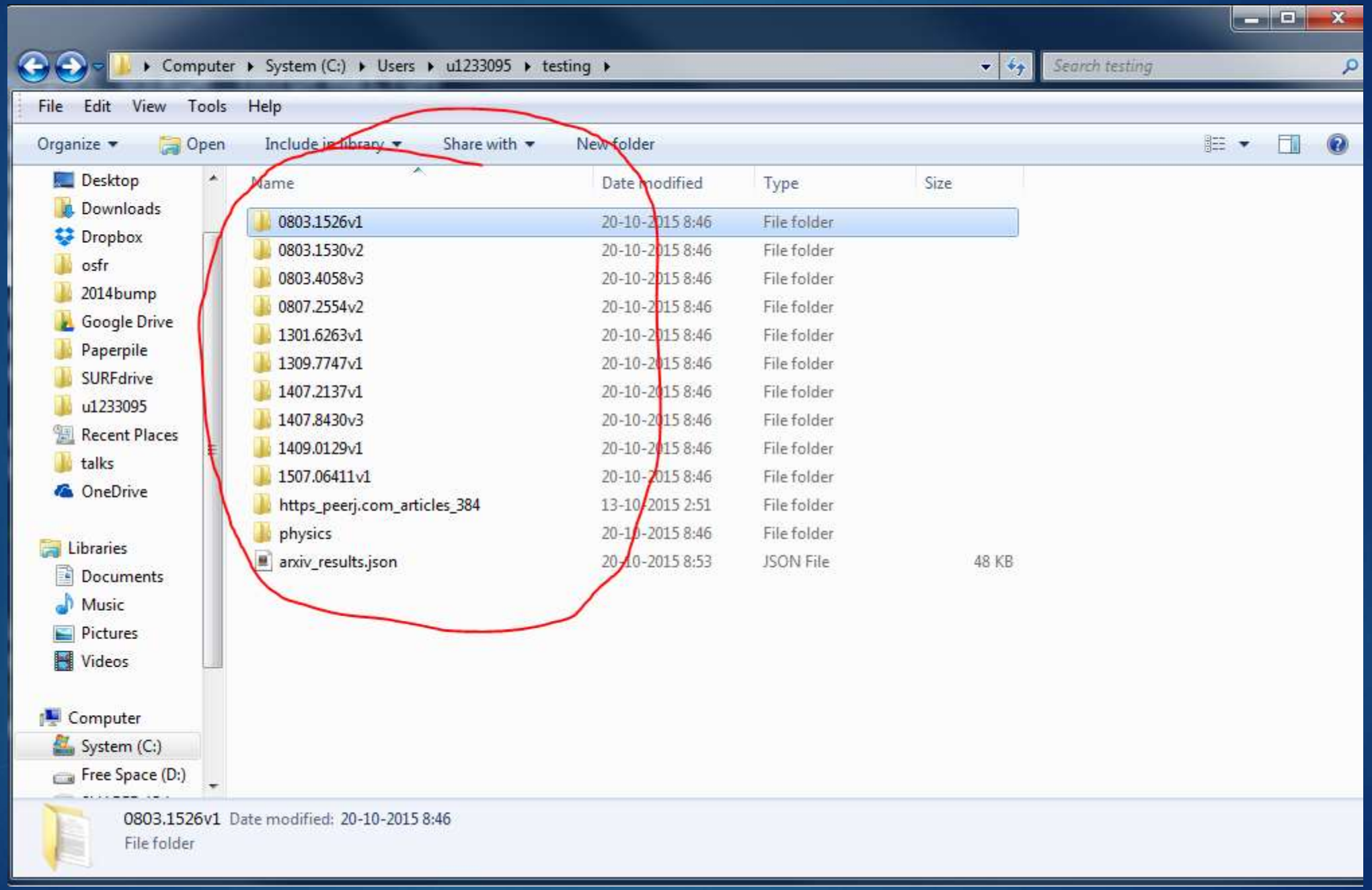


CONTENT MINE

Demonstration of the new literature search

```
Windows PowerShell
Copyright (C) 2012 Microsoft Corporation. All rights reserved.

PS C:\Users\u1233095> getpapers

  Usage: getpapers [options]

  Options:

    -h, --help                output usage information
    -V, --version             output the version number
    -q, --query <query>       Search query (required)
    -o, --outdir <path>       Output directory (required - will be created if not found)
    --api <name>              API to search [eupmc, ieee, arxiv] (default: eupmc)
    -x, --xml                 Download fulltext XMLs if available
    -p, --pdf                 Download fulltext PDFs if available
    -s, --supp                Download supplementary files if available
    -l, --loglevel <level>    amount of information to log (silent, verbose, info*, data, warn, error, or debug)
    -a, --all                 search all papers, not just open access
```

```
PS C:\Users\u1233095> getpapers --outdir testing --pdf --api arxiv --query "misconduct"
info: Searching using arxiv API
info: Found 15 results
Retrieving results [==============================] 100% (eta 0.0s)
info: Done collecting results
info: Saving result metdata
info: Full ArXiv result metadata written to arxiv_results.json
info: Downloading fulltext PDF files
Downloading files [==============================] 100% (eta 0.0s)
info: All PDF downloads succeeded!
```


Computer ▸ System (C:) ▸ Users ▸ u1233095 ▸ testing ▸
Search testing
File Edit View Tools Help
Organize Open Include in library Share with New folder
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Downloads
Dropbox
osfr
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Google Drive
Paperpile
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Videos
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0803.1526v1 20-10-2015 8:46 File folder
0803.1530v2 20-10-2015 8:46 File folder
0803.4058v3 20-10-2015 8:46 File folder
0807.2554v2 20-10-2015 8:46 File folder
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arxiv_results.json 20-10-2015 8:53 JSON File 48 KB
0803.1526v1 Date modified: 20-10-2015 8:46
File folder

- Stop the citation game
- Help yourself, be open
- Fight for your creative rights

@chartgerink
www.chjh.nl

Happy Open Access week! ☺