



Nuevos métodos de análisis cienciométricos: altmetrics y los estudios de medios de la ciencia

Rodrigo Costas

Centre for Science and Technology Studies (CWTS-Leiden University)

Centre for Research on Evaluation, Science and Technology (CREST-
Stellenbosch University)



Universiteit
Leiden

12 September 2019

Outline

- What are altmetrics?
 - Concept(s)
 - Sources
- What do we know about altmetrics?
 - ... a bit of theory
 - Coverage (time, fields and topics)
 - Main bibliographic characteristics
 - Others
- What can we do with them?
- The future?

Altmetrics? Concept(s)

- Altmetrics Manifesto (2010) (<http://altmetrics.org/manifesto/>)
 - Simple definition: *'any metric around research products, except citations'*
 - Working definition: *events on social and mainstream media platforms related to scholarly content or scholars [...] and are not the same as [...] citations* (Haustein, Bowman, Costas, 2015)
 - Frequently 'defined' by the data providers (e.g. Policy documents)
 - Diversity!



- Main challenge: **what do they mean?**

Sources

- Mendeley



- Altmetric.com



- PlumAnalytics



- ImpactStory **ImpactStory.**

- PLoS – Article-level metrics



Do "altmetrics" correlate with citations? Extensive comparison of altmetric indicators with citations from a multidisciplinary perspective

428
Readers

Costas R, Zahedi Z, Wouters P

Journal of the Association for Information Science and Technology (2015) 66(10) 2003-2019

[Sign in to add to library](#)

[Get full text at journal](#)

[Overview](#) [Authors \(3\)](#)

Abstract

(Open Nottingham OER report; survey of 51 undergraduates' use of OER.)

Author-supplied keywords

• [bibliometrics](#) • [databases](#)

Find this document

ISSN: [23301643](#)

ISBN: [9783848215430](#)

PUI: [607033882](#)

arXiv: [0803.1716](#)

SGR: [84924998893](#)

SCOPUS: [2-s2.0-84924998893](#)

DOI: [10.1002/asi.23309](#)


PMID: [502955140](#)

Get free article suggestions today

Do "altmetrics" correlate with citations? Extensive comparison of altmetric indicators with citations from a multidisciplinary perspective

by Rodrigo Costas, Zohreh Zahedi, Paul Wouters

Computer and Information Science > Miscellaneous Papers

 View in Mendeley Desktop

Share   

Overview

Related research

Journal of the Association for Information Science and Technology (2015)

Volume: 66, Issue: 10, Publisher: John Wiley and Sons Inc., Pages: 2003-2019


ISSN: 23301643

ISBN: 9783848215430

DOI: 10.1002/asi.23309

PubMed: 502955140

arXiv: 1401.4321

 Get full text at journal

Abstract

An extensive analysis of the presence of different altmetric indicators provided by Altmetric.com across scientific fields is presented, particularly focusing on their relationship with citations. Our results confirm that the presence and density of social media altmetric counts are still very low and not very frequent among scientific publications, with 15%-24% of the publications presenting some altmetric activity and concentrating in the most recent publications, although their presence is increasing over time. Publications from the social sciences, humanities and the medical and life sciences show the highest presence of altmetrics, indicating their potential value and interest for these fields. The analysis of the relationships between altmetrics and citations confirms previous claims of positive correlations but relatively weak, thus supporting the idea that altmetrics do not reflect the same concept of impact as citations. Also, altmetric counts do not always present a better filtering of highly cited publications than journal citation scores. Altmetrics scores (particularly mentions in blogs) are able to identify highly cited publications with higher levels of precision than journal citation scores (JCS), but they have a lower level of recall. The value of altmetrics as a complementary tool of citation analysis is highlighted, although more research is suggested to disentangle the potential meaning and value of altmetric indicators for research evaluation.

Author-supplied keywords

 bibliometrics  databases


Authors on Mendeley

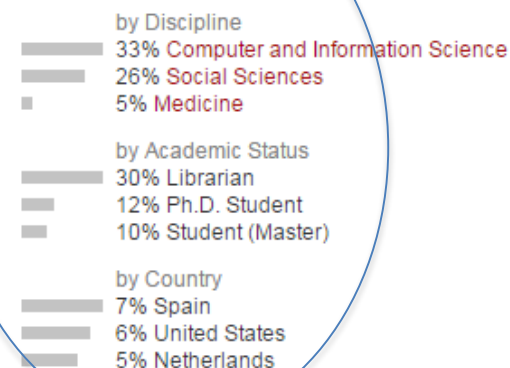


Zohreh Zahedi
Ph.D. Student
Leiden, Netherlands





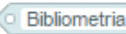

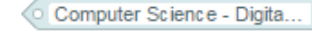
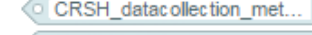
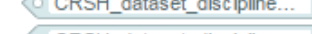
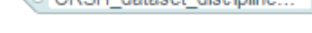
47 followers

Readership Statistics

 199 Readers on Mendeley



Tags

 altmetrics  Altmetrics  análise de citação
 Article  Bibliometria  citations
 Computer Science - Digita...
 CRSH_datacollection_met...
 CRSH_dataset_discipline...
 CRSH_dataset_discipline...



We make article level metrics easy.



Scientists talk. Let's listen.

Every day, thousands of scholarly papers are being discovered, discussed and shared.

Altmetric tracks what people are saying about research papers online on behalf of institutions, publishers, authors, libraries and institutions.

[Find out more](#)

Who is Altmetric for?

中国东北高校招聘

Recruitment for Universities in Northeast China



大连理工大学 哈尔滨工程大学 东北林业大学 东北师范大学

Institution: LEIDEN
UNIVERSITY

Log in
My account
Contact Us



Close x

Science

Authors | Members | L

Home

News

Journals

Topics

Careers

Search

Science

Science Advances

Science Immunology

Science Robotics

Science Signaling

Science Translational Medicine

SHARE

RESEARCH ARTICLE



Evidence for High-Energy Extraterrestrial Neutrinos at the IceCube Detector

IceCube Collaboration*

* Full author list after Acknowledgments.

Science 22 Nov 2013:
Vol. 342, Issue 6161, pp.
DOI: 10.1126/science.1242856

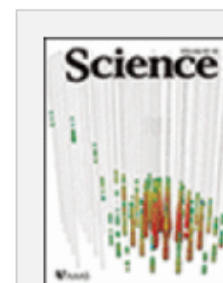
Article

Figures & Data

Info & Metrics

eLetters

PDF



Science

Vol 342, Issue 6161
22 November 2013

Table of Contents
Print Table of Contents
Advertising (PDF)
Classified (PDF)
Masthead (PDF)

ARTICLE TOOLS

Email

Print

Alerts

Citation tools

Download Powerpoint

Save to my folders

Request Permissions

Share

You are currently viewing the abstract.

View Full Text



Advertisement



Plum Analytics



Usage – clicks, downloads, views, library holdings, video plays



Captures – bookmarks, code forks, favorites, readers, watchers



Mentions – blog posts, comments, reviews, Wikipedia links



Social media – +1s, likes, shares, tweets [Learn more](#)



Citations – PubMed Central, Scopus, patents [Learn more](#)

A preview of the Plum Analytics dashboard. It features a purple header with the Plum Analytics logo. Below the header, there are five colored circular icons (green, purple, yellow, blue, orange) arranged in a star pattern, with a white mouse cursor pointing at the center. To the right of the icons is a white panel with a purple header containing the Plum Analytics logo. The panel displays the following data:

Usage
Abstract Views: 44
PDF Views: 1253
HTML Views: 10348

Captures
Exports-saves: 7
Readers: 44

Mentions
Comments: 11

Social Media
Likes: 22
Shares: 15
+1: 4

Citations
CrossRef: 9



Comparative genomics of Cluster O mycobacteriophages.

Citation data: PLoS one, ISSN: 1932-6203, Vol: 10, Issue: 3, Page: e0118725

Publication Year: 2015

USAGE ^	1927	CAPTURES ^	5	MENTIONS ^	19	SOCIAL MEDIA ^	80	CITATIONS ^	1
HTML Views ☉	1512	Exports-Saves ☉	4	Comments ☉	19	Likes ☉	80	Cited by ☉	1
PLoS	1316	EBSCO	4	Facebook	19	Facebook	80	PMCEurope	1
PubMedCentral	186	Readers ☉	1					PubMed Central	1
EBSCO	10	Mendeley	1					CrossRef	1
PDF Views ☉	251								
PLoS	206								
PubMedCentral	45								
Abstract Views ☉	155								
EBSCO	155								
Clicks ☉	5								
Bitly	5								
Downloads ☉	4								
EPrint	4								

ImpactStory.



Your CV, but better.

“ Impactstory looks great and works beautifully.

The new standard for scientific CVs. ”

– Pietro Gatti Lafranconi, Cambridge University

[Try it for free](#)

featured in and funded by



nature

THE CHRONICLE
of Higher Education

JISC



ALFRED P. SLOAN
FOUNDATION



National
Science
Foundation



Impactstory

Carl Boettiger

Overview

Map

Twitter fans

articles (19)

datasets (25)

figures (1)

posters (3)

slide decks (17)

software products (75)

Early warning signals: the charted and uncharted territories

Boettiger, Ross, Hastings.

2013 *Theoretical Ecology*

Summary

Full text

Metrics (6)

Map (25)

Tweets (15)

100 Mendeley readers

96th percentile on Impactstory

12 Scopus citations

91st percentile on Impactstory

161 Impactstory views

99th percentile on Impactstory

15 Twitter tweets

86th percentile on Impactstory









1 science blogs blog post
















88th percentile on Impactstory

1 Facebook facebook post

86th percentile on Impactstory

Metrics are computed based on the following data sources (column names for are in parentheses):

- **altmetric_com:** We make article level metrics easy.
 -  **blog posts** Number of blog posts mentioning the product (altmetric_com:blog_posts)
 -  **Facebook public posts** Number of posts mentioning the product on Facebook wall (altmetric_com:facebook_posts)
 -  **Google+ posts** Number of posts mentioning the product on Google+ (altmetric_com:gplus_posts)
 -  **Twitter tweets** Number of times the product has been tweeted (altmetric_com:tweets)
- **arxiv:** arXiv is an e-print service in the fields of physics, mathematics science, quantitative biology, quantitative finance and statistics.
- **citeulike:** CiteULike is a free service to help you to store, organise and share the scholarly papers you are reading.
 -  **bookmarks** Number of users who have bookmarked this item. (citeulike:bookmarks)
- **crossref:** An official Digital Object Identifier (DOI) Registration Agency of the International DOI Foundation.
- **delicious:** Online social bookmarking service
 -  **bookmarks** The number of bookmarks to this artifact (maximum=100). (delicious:bookmarks)
- **dryad:** An international repository of data underlying peer-reviewed articles in the basic and applied biology.
 -  **package views** Dryad package views: number of views of the main package page (dryad:package_views)
 -  **total downloads** Dryad total downloads: combined number of downloads of the data package and data files (dryad:total_downloads)
- **figshare:** Make all of your research outputs sharable, citable and visible in the

- **figshare:** Make all of your research outputs sharable, citable and visible in the browser for free.
 -  **downloads** The number of times this has been downloaded (figshare:downloads)
 -  **shares** The number of times this has been shared (figshare:shares)
 -  **views** The number of times this item has been viewed (figshare:views)
- **github:** A social, online repository for open-source software.
 -  **forks** The number of people who have forked the GitHub repository (github:forks)
 -  **stars** The number of people who have given the GitHub repository a star (github:stars)
- **mendeley:** A research management tool for desktop and web.
 -  **career stage, top 3 percentages** Percent of readers by career stage, for top three career stages (csv, api only) (mendeley:career_stage)
 -  **country, top 3 percentages** Percent of readers by country, for top three countries (csv, api only) (mendeley:country)
 -  **discipline, top 3 percentages** Percent of readers by discipline, for top three disciplines (csv, api only) (mendeley:discipline)
 -  **groups** The number of groups who have added the article to their libraries (mendeley:groups)
 -  **readers** The number of readers who have added the article to their libraries (mendeley:readers)
- **plossearch:** PLoS article level metrics.
 -  **mentions** the number of times the research product was mentioned in the full text of PLOS papers (plossearch:mentions)
- **pubmed:** PubMed comprises more than 21 million citations for biomedical literature.
 -  **reviewed** The article has been reviewed by F1000 (pubmed:f1000)
 -  **citations** The number of citations by papers in PubMed Central (pubmed:pmc_citations)
 -  **citations: editorials** The number of citations by editorials papers in PubMed Central (pubmed:pmc_citations_editorials)
 -  **citations: reviews** The number of citations by review papers in PubMed Central (pubmed:pmc_citations_reviews)
- **scopus:** The world's largest abstract and citation database of peer-reviewed

Public Library of Science (PLOS)

At PLOS, we believe that research articles should primarily be judged on their individual merits, rather than on the basis of the journal in which they were published. In March 2009, we inaugurated a program to provide Article-Level Metrics (ALM) on every article across all journals. Article-Level Metrics (ALMs) capture the manifold ways in which research is disseminated and can help users determine the value of an article to them and to their scientific community. The regularly updated data include the following metrics:


Viewed	Saved	Discussed	Recommended	Cited
PLOS Journals (HTML, PDF, XML)	Mendeley CiteULike	Twitter Facebook Wikipedia Reddit PLOS Comments ResearchBlogging ScienceSeeker Nature Blogs Wordpress.com	F1000Prime	CrossRef Scopus Web of Science PubMed Central PMC Europe PMC Europe Database Links

The article metrics are made available rapidly after publication and are continually updated. Each source captures different behaviors and thus its natural activity will vary by time (i.e., publication age) and research area of the article. Further discussion of known limitations to individual metrics is detailed in the [section below](#).


 OPEN ACCESS
  PEER-REVIEWED

RESEARCH ARTICLE

Characterizing Social Media Metrics of Scholarly Papers: The Effect of Document Properties and Collaboration Patterns

Stefanie Hausteин , Rodrigo Costas, Vincent Larivière

Published: March 17, 2015 • DOI: 10.1371/journal.pone.0120495

Article

Authors

Metrics

Comments

Related Content



Correction (1)

Abstract

Introduction

Materials and Methods

Results and Discussion

Conclusions

Supporting Information

Acknowledgments

Author Contributions

References

Reader Comments (0)

Media Coverage (0)

 **Correction**

8 May 2015: Hausteин S, Costas R, Larivière V (2015) Correction: Characterizing Social Media Metrics of Scholarly Papers: The Effect of Document Properties and Collaboration Patterns. PLoS ONE 10(5): e0127830. doi: 10.1371/journal.pone.0127830 | [View correction](#)

Abstract


A number of new metrics based on social media platforms—grouped under the term “altmetrics”—have recently been introduced as potential indicators of research impact. Despite their current popularity, there is a lack of information regarding the determinants of these metrics. Using publication and citation data from 1.3 million papers published in 2012 and covered in Thomson Reuters' Web of Science as well as social media counts from Altmetric.com, this paper analyses the main patterns of five social media metrics as a function of document characteristics (i.e., discipline, document type, title length, number of pages and

71
Saves9
Citations6,824
Views27
Shares

Download PDF

Print

Share

 CrossMark
Related PLOS Articles

Correction: Characterizing Social Media Metrics of Scholarly Papers: The Effect of Document Properties and Collaboration Patterns

Included in the Following Collection

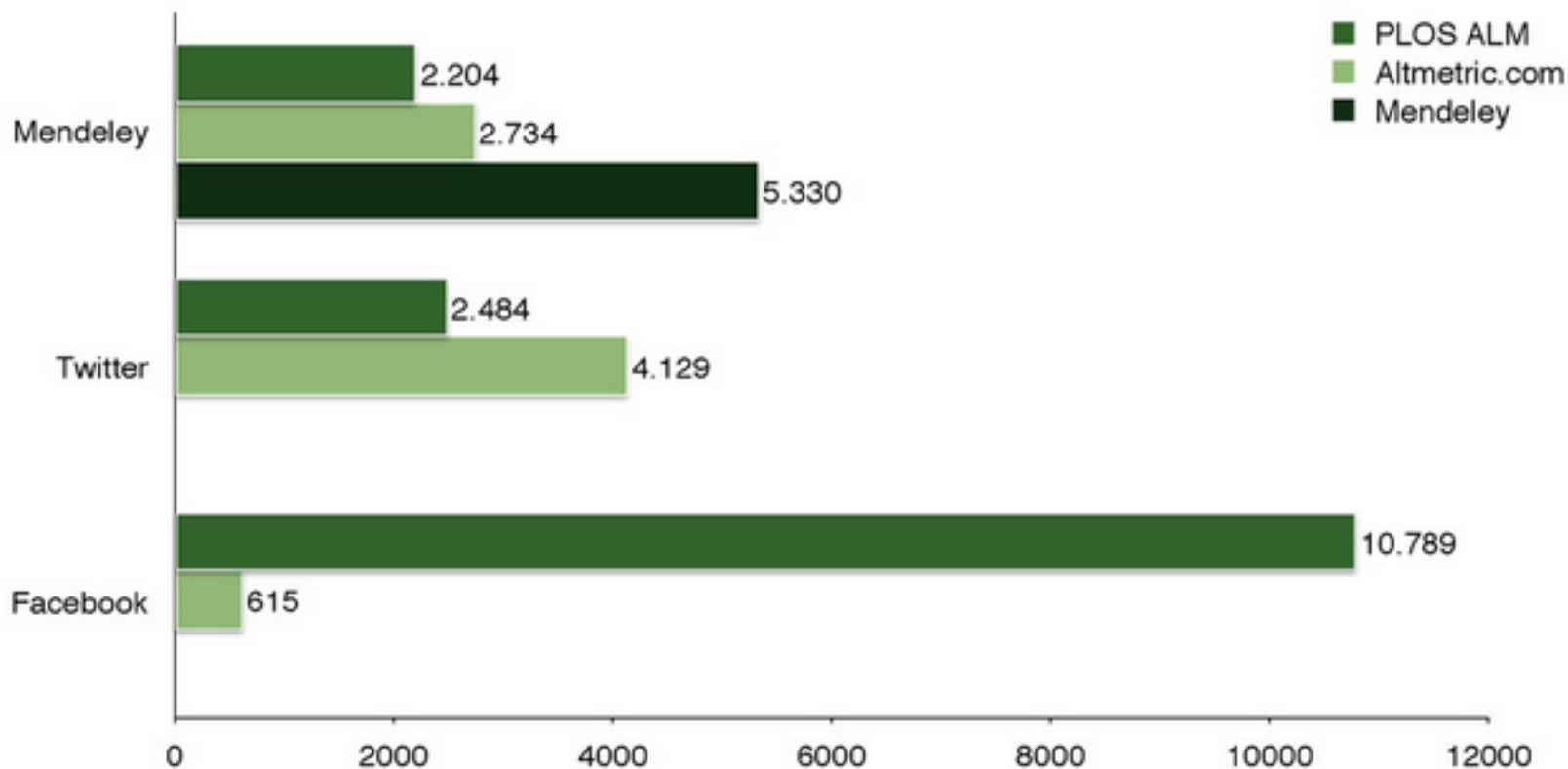
Altmetrics

Subject Areas



Data inconsistencies¹

Results: Total events



Total number of events for 1,000 random 2013 PLOS ONE DOIs.

What do we know? A bit of theory

Framework of 'acts' around Research Objects

Otlet (1934): "set of facts or ideas presented in the form of a text or image"

Bourdieu (1975): entities within the scholarly community.



DOCUMENT



AGENT

Access



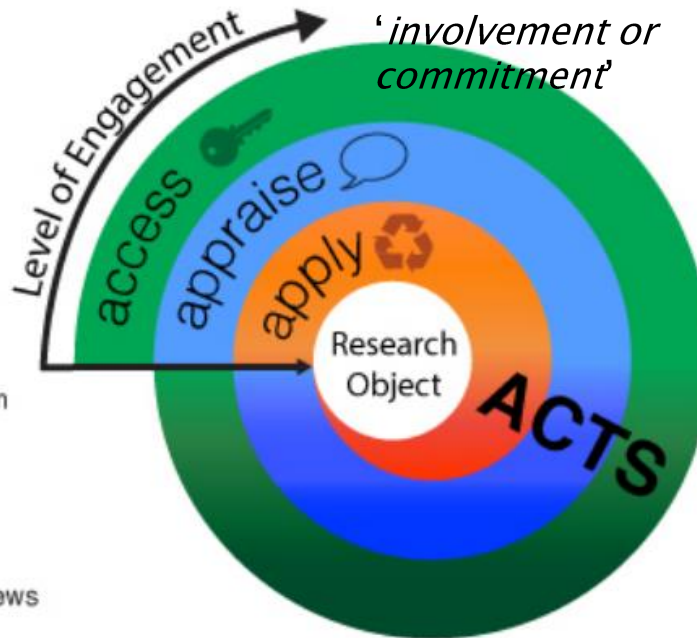
viewing metadata
accessing content
storing research object

viewing homepage
emailing
downloading CV



on a microblog platform
in a social network
in a comment
on a Q&A site
on a listserv
on a rating or voting platform
in a podcast or video
in a presentation
in a review
in a blog post
in a Wikipedia article
in mainstream media and news
in a scientific document
in a policy document

on a microblog platform
in a social network
in a comment
on a Q&A site
on a listserv
on a rating or voting platform
in a podcast or video
in a presentation
in a review
in a blog post
in a Wikipedia article
in mainstream media and news
in a scientific document
in a policy document



Appraise



Apply



theories, methods, or results
software code
datasets

collaboration



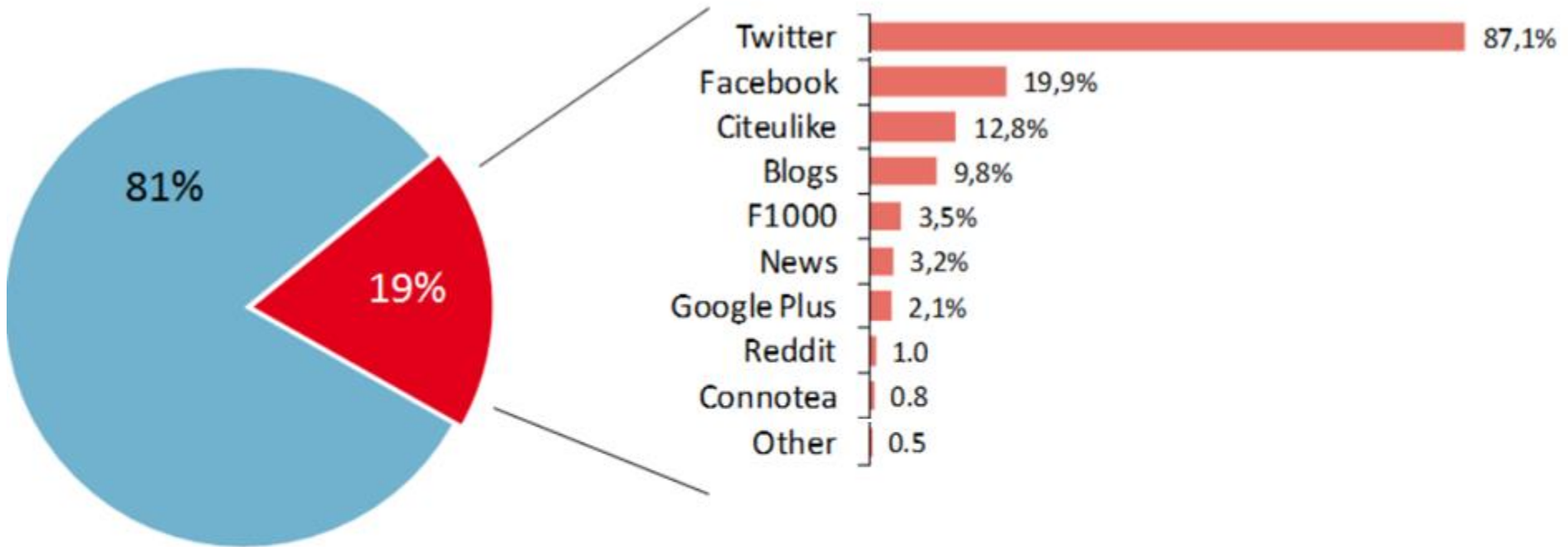
<http://arxiv.org/abs/1502.05701>

A discussion of the 'promises'

- Diversity of scientific publishing
 - *Strongest argument*
 - *More research is still necessary*
- Broader dimensions of scientific performance
 - *Do we agree with and understand these new dimensions?*
 - *What does a 'tweet' or a 'Mendeley reader' mean from a performance point of view?*
- Speed
 - *Is faster always better? Superficiality?*
 - *'Sleeping beauties' or 'Mendel syndrome'*
- Openness
 - *Openness is good*
 - *Transparency and consistency are more important*

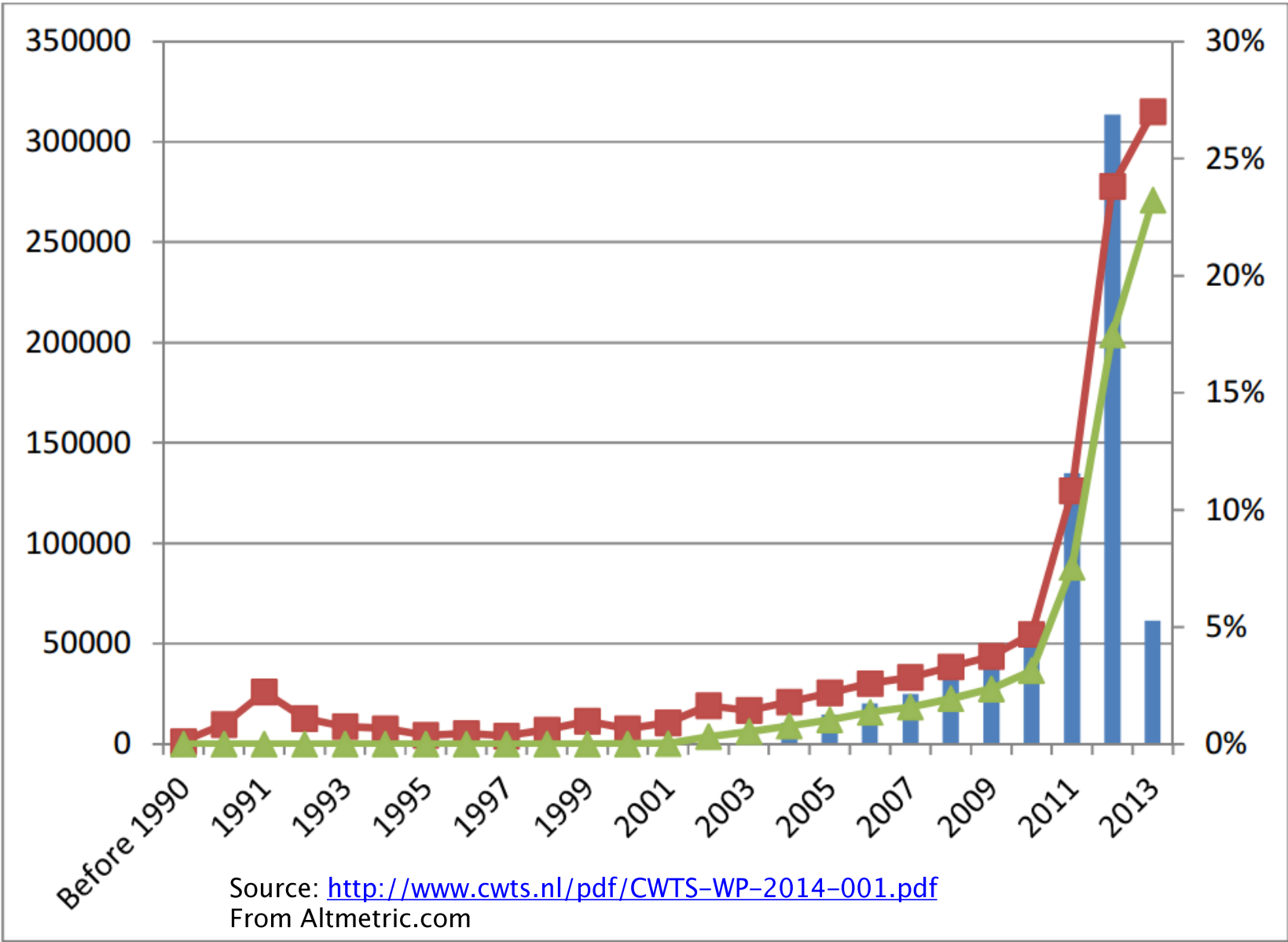
Coverage of publications per source

Adapted from: <http://dx.doi.org/10.3145/epi.2014.jul.03>



- WoS publications with DOI not included in Altmetric.com
- WoS publications with DOI included in Altmetric.com

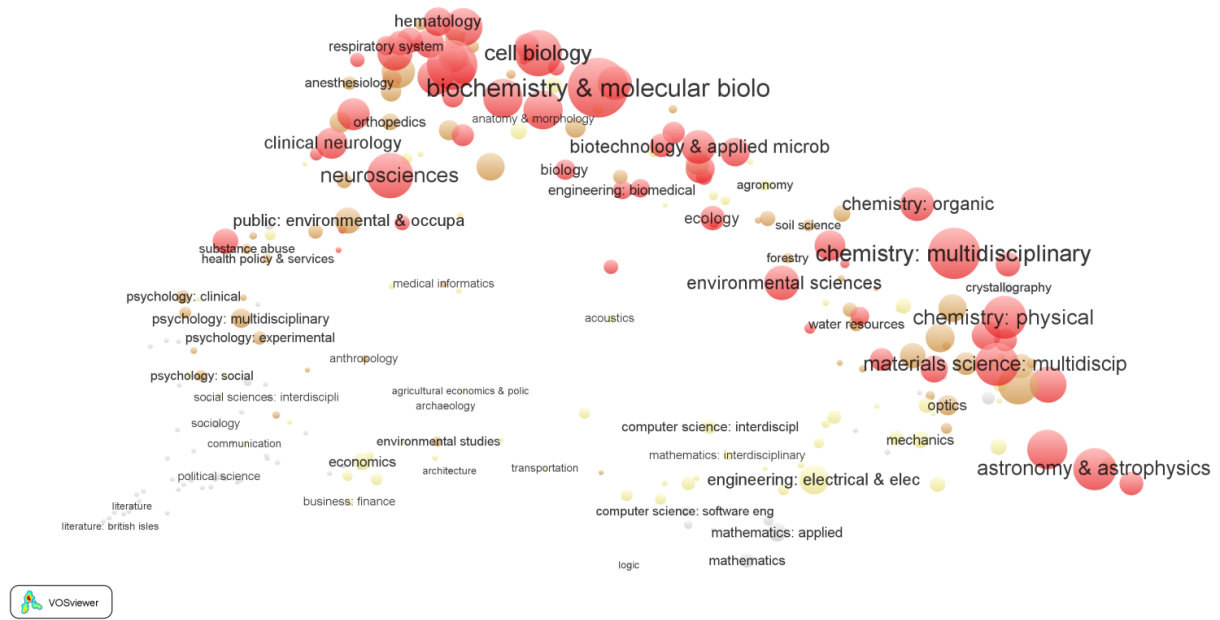
Increasing coverage over time



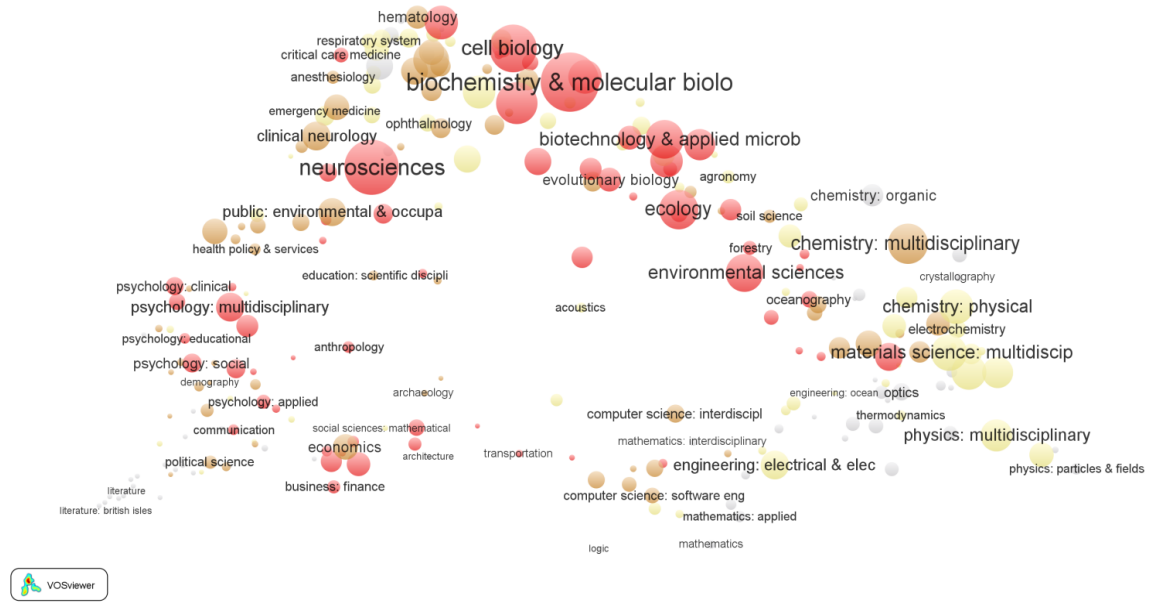
Coverage by fields

<http://dx.doi.org/10.1108/AJIM-12-2014-0173>

Citations

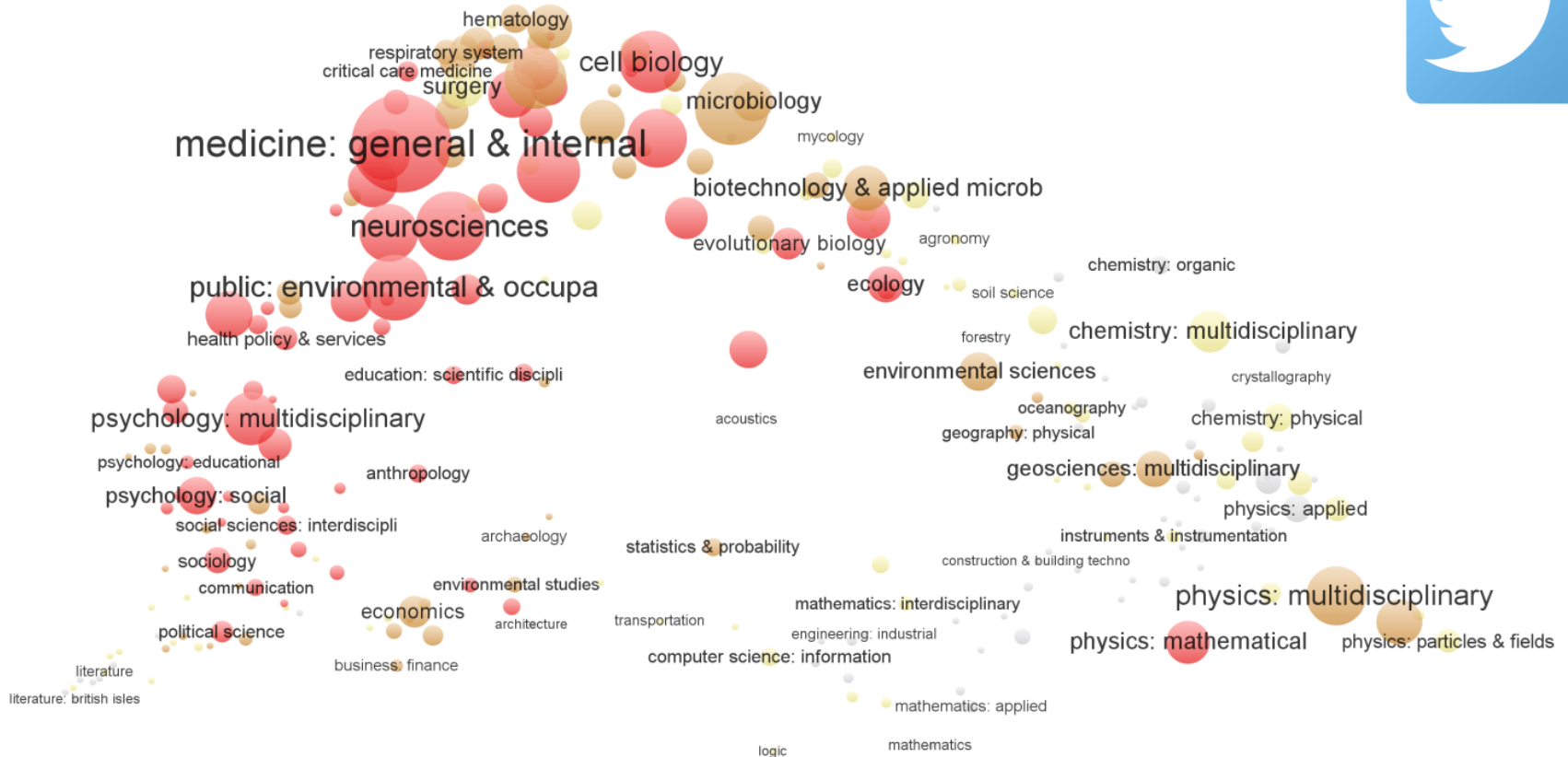


Mendeley



Coverage by fields

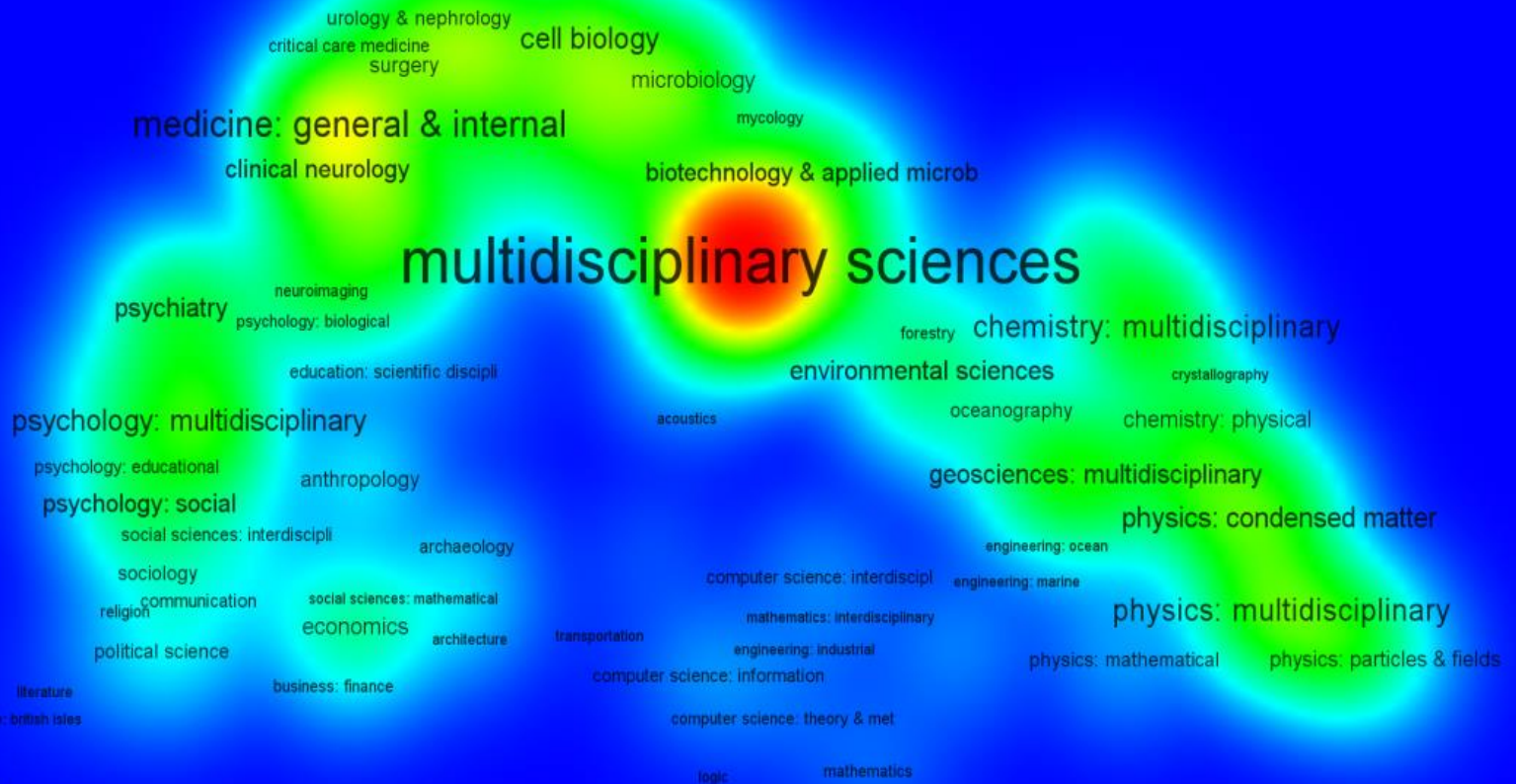
- Some relevant patterns:
 - Twitter: **stronger in Social Sciences and General medicine, weaker in Natural Sciences and Humanities**



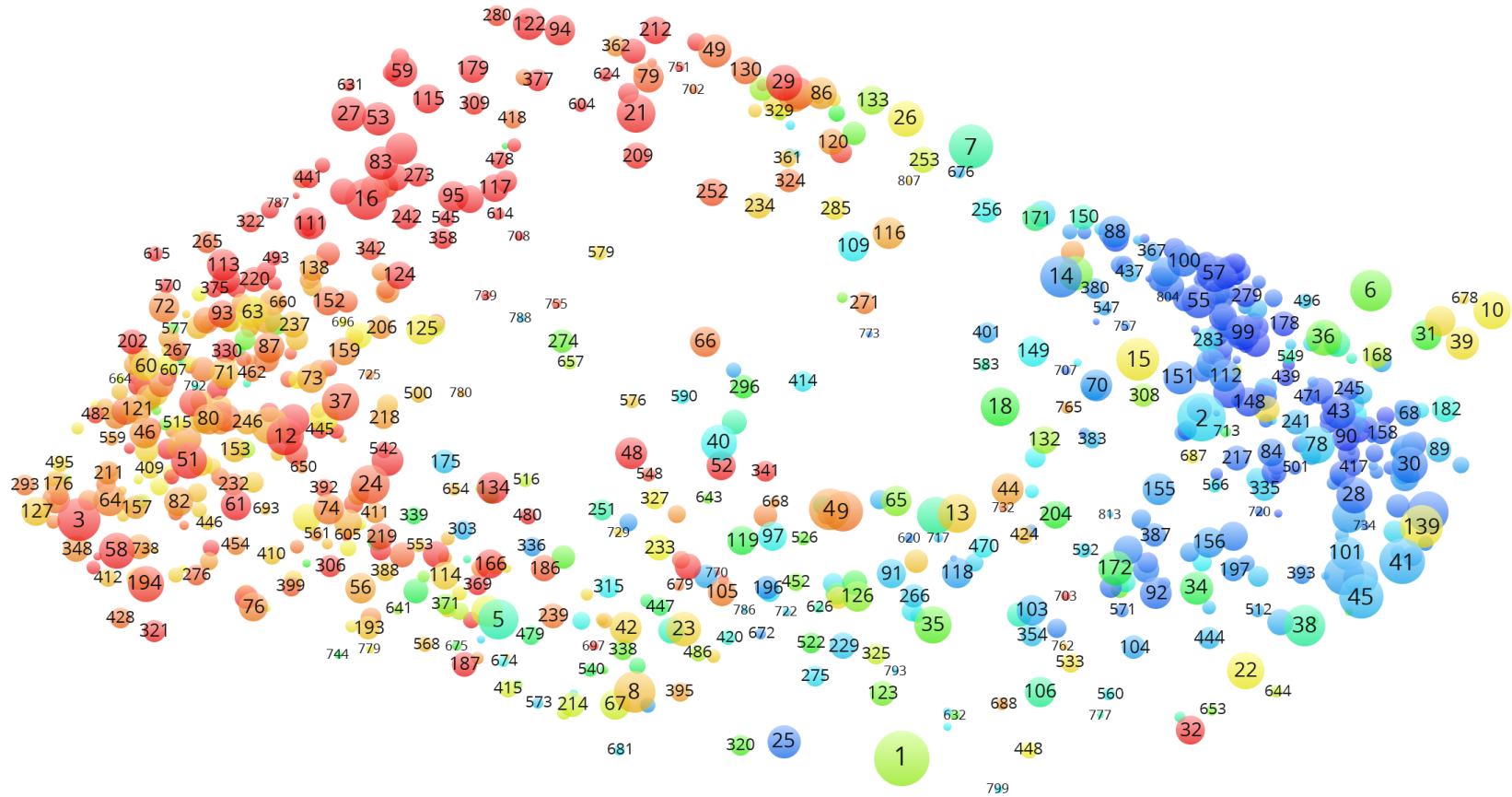
Coverage by fields

<http://dx.doi.org/10.1108/AJIM-12-2014-0173>

- Blogs and news media have a strong focus on **multidisciplinary journals!**



Topics with the highest PP(tw1)








Term map

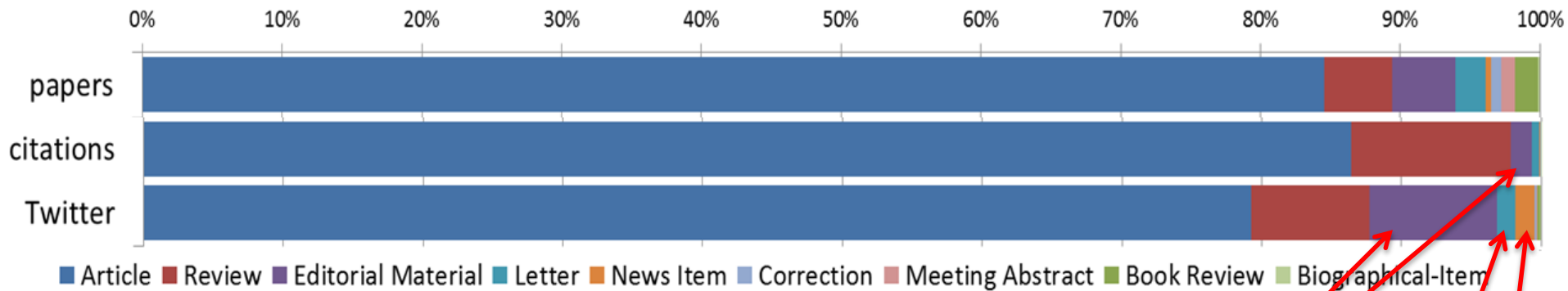
- <http://dx.doi.org/10.6084/m9.figshare.1041770>

Main characteristics

- **Moderate** correlations for **Mendeley** and *good filtering of highly cited publications*

	C	SC					
C	1.000	0.664	0.124	0.194	0.097	0.065	0.083
SC		1.000	0.083	0.092	0.047	0.040	0.061
B			1.000	0.194	0.180	0.196	0.279
T				1.000	0.320	0.142	0.137
F					1.000	0.144	0.161
G						1.000	0.179
M							1.000

Distribution by document types



Opinions, discussions, current events, recent developments ('novelty')

Editorial Material:

An article that gives the opinions of a person, group, or organization. Includes editorials, interviews, commentary, discussions between individual, post-paper discussions, round table symposia, and clinical conferences

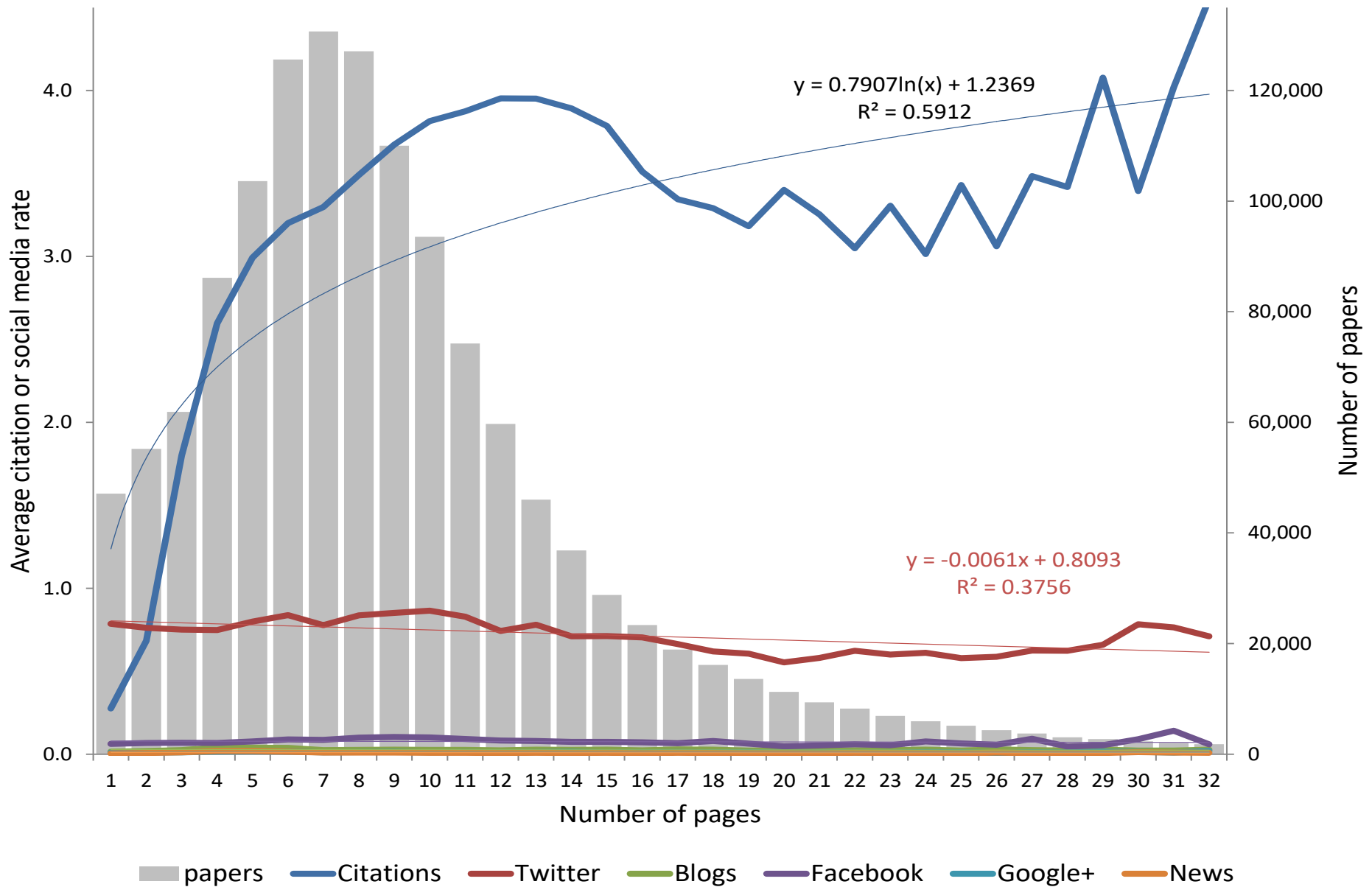
Letters

News items

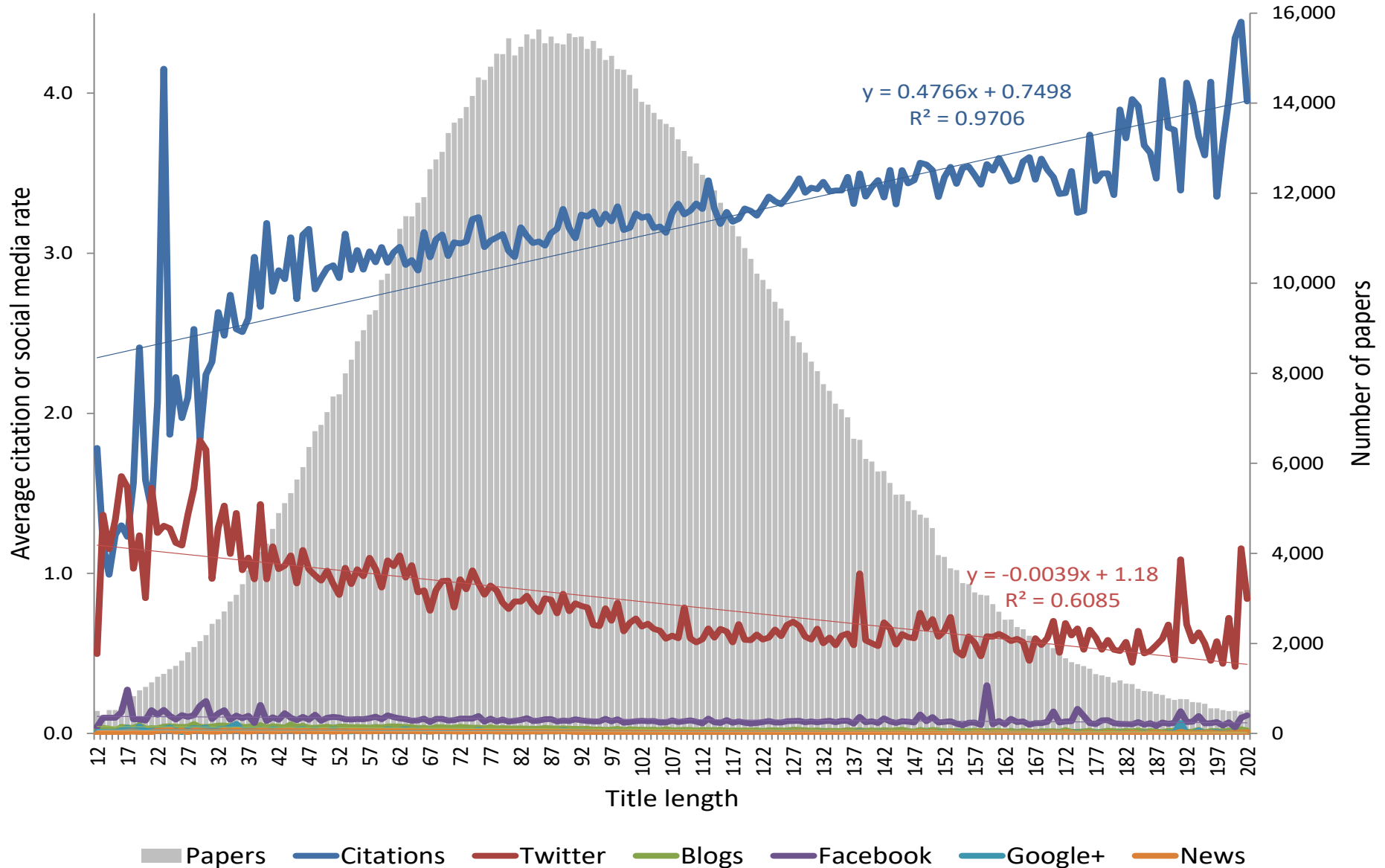
News, current events, and recent developments.



Number of pages

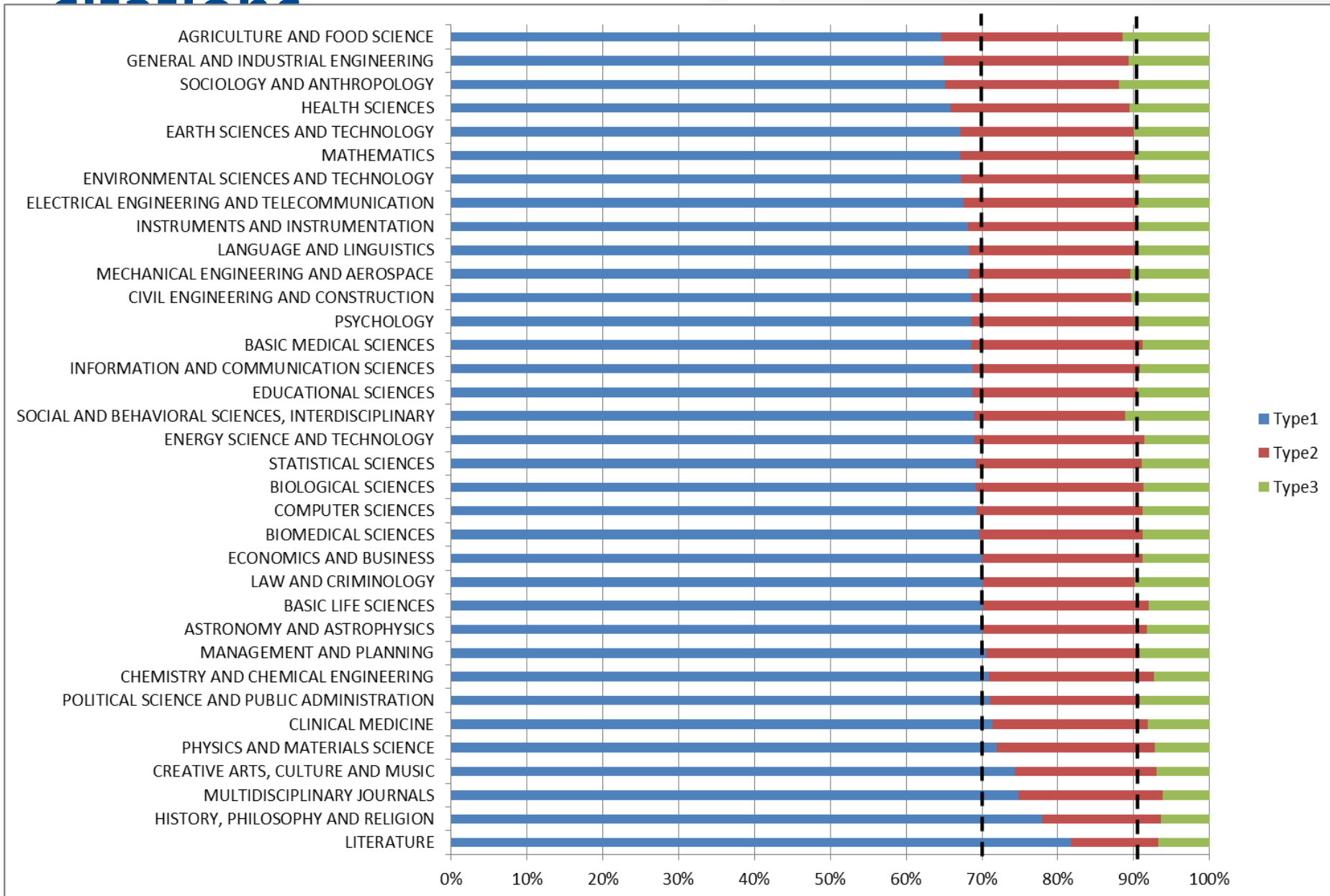


Length of the titles

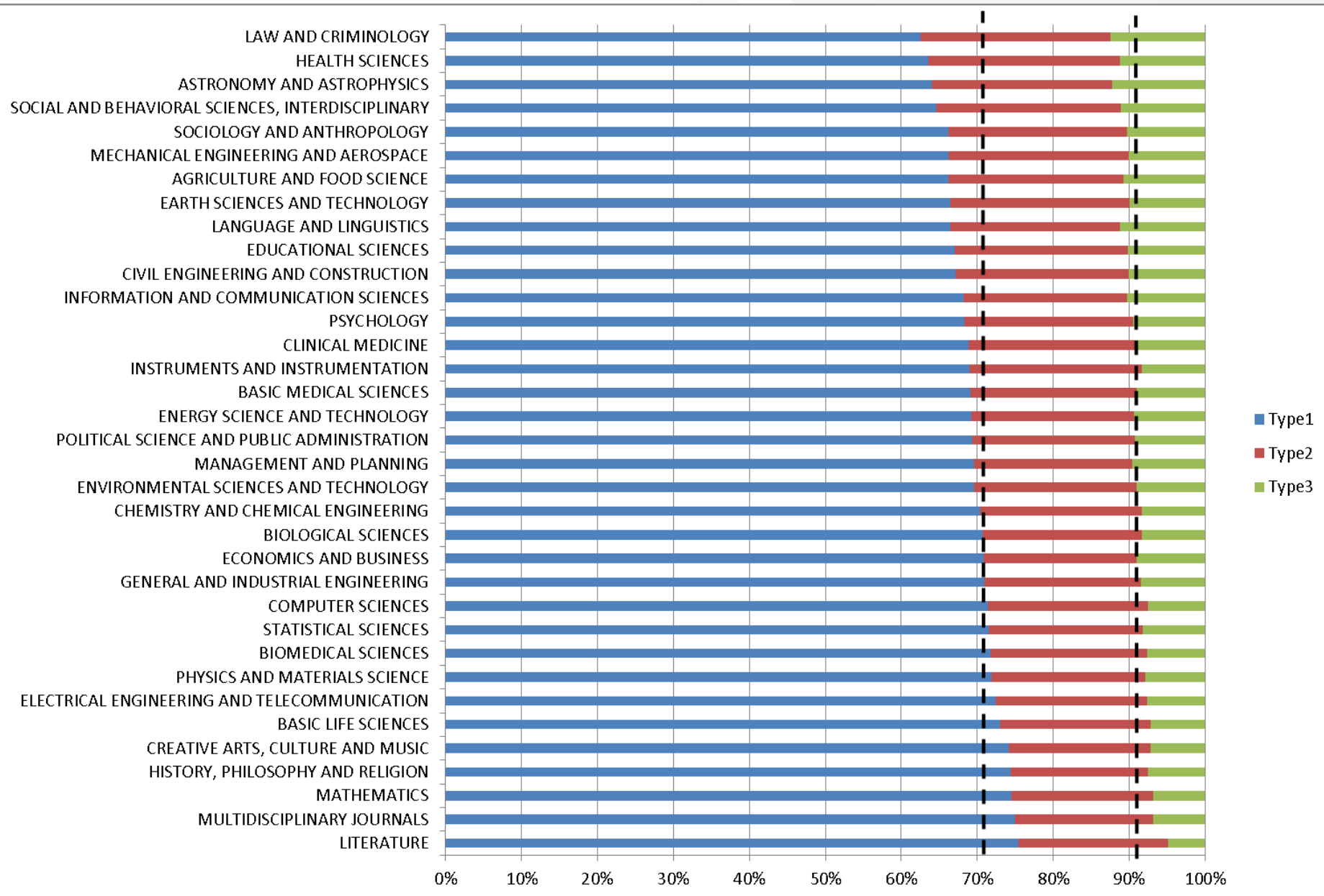


Characteristic Scores & Scales –

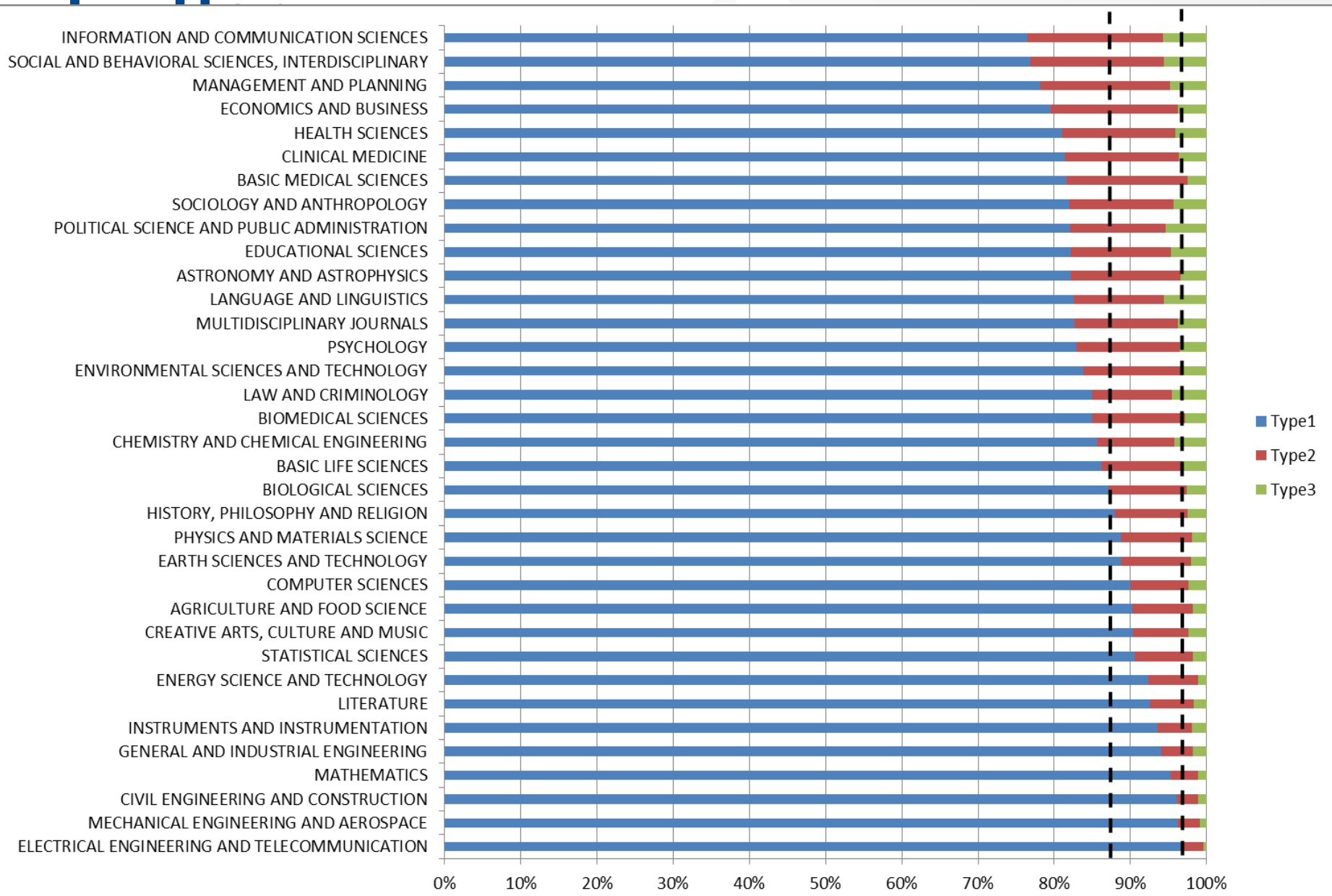
situations



Characteristic Scores & Scales – Mendeleley



Characteristic Scores & Scales-



Others: *funny things*

Can apparent superluminal neutrino speeds be explained as a quantum weak measurement?

M V Berry¹, N Brunner¹, S Popescu¹ & P Shukla²

¹H H Wills Physics Laboratory, Tyndall Avenue, Bristol BS8 1TL, UK

²Department of Physics, Indian Institute of Technology, Kharagpur, India

Abstract

Probably not.

Keywords: quantum measurement, interference, neutrino oscillations



Close x



Search for your next job from



- Picked up by 8 news outlets
 - Blogged by 14
 - Tweeted by 6779
 - Mentioned by 1 peer review sites
 - Mentioned by 4 weibo users
 - On 50 Facebook pages
 - Mentioned in 15 Google+ posts
- [Click for more details](#)

Science > Animal Behavior > Ethology > Vol 120 Issue 11 > Abstract



Research Paper

Variation in Melanism and Female Preference in Proximate but Ecologically Distinct

Zachary W. ...
 Bautista-H...
 Lenin Ari...
 4
 Article first...
 DOI: 10.1...
 © 2014 Bla...

fry in the laboratory (M. Tobler, pers. obs.).

Although association preferences documented in our study theoretically could be a consequence of either mating or shoaling preferences in the different female groups investigated (should we cite the crappy Gabor paper here?), shoaling preferences are unlikely drivers of the documented patterns both because of evidence from previous research and inconsistencies with *a priori* predictions. Our methods closely followed those of published mate choice experiments in this system (Tobler et al. 2009a,b; Plath et al. 2013), and association time is a standard metric of mate

SEARCH

In this issue

Advanced

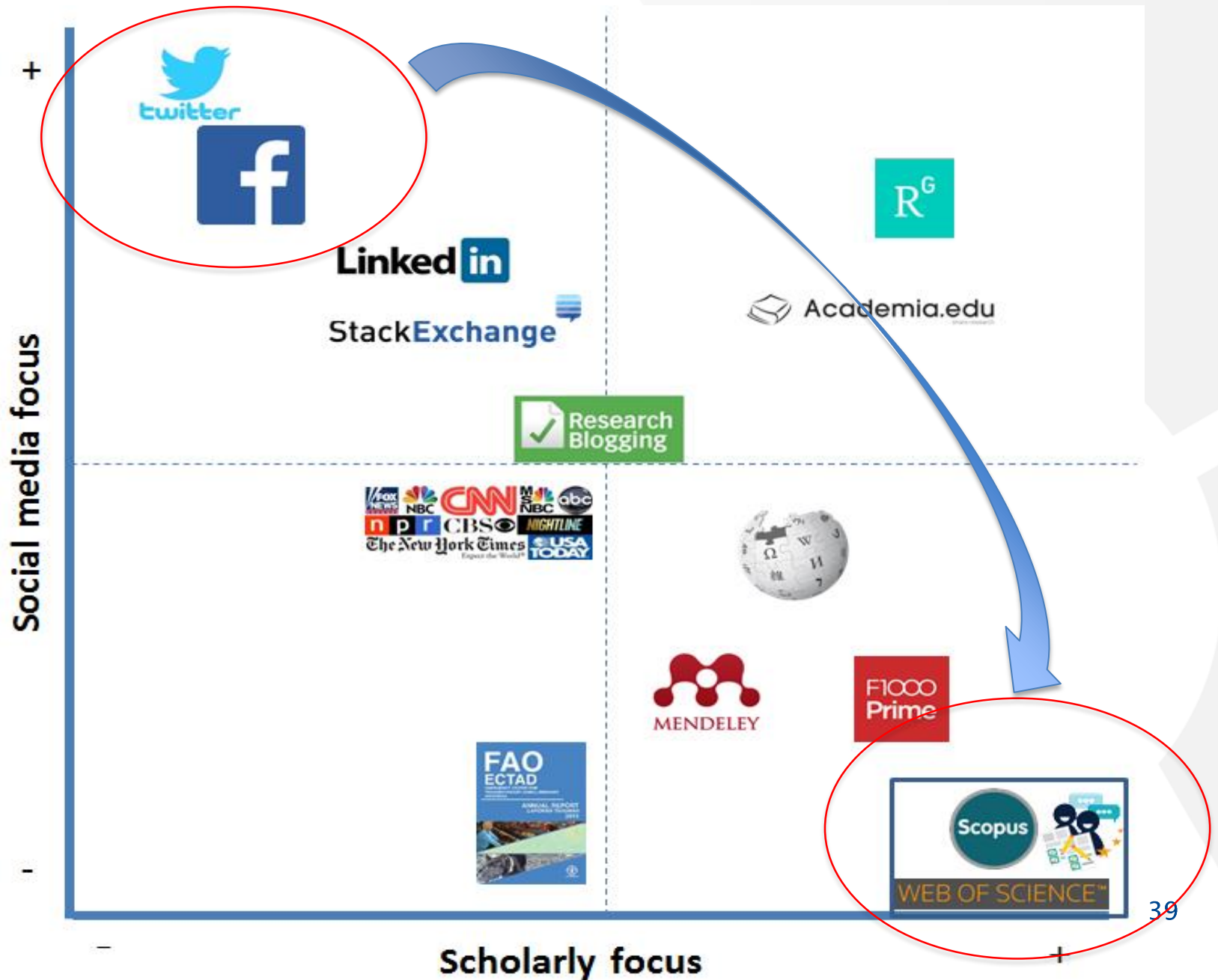
ARTICLE 1

- Get PDF
- Save to
- E-mail
- Export

Other data problems

- Inconsistencies inter-platform (e.g. changes in readerships counts in Mendeley, duplicates, meta data errors, noise, etc.)
- Presence of ‘cyborgs’ and ‘bots’ among social media users (<http://doi.org/10.1002/asi.23456>)
- Biases: geographic, language or even technical (e.g. presence of DOIs, tradition of linking to papers, etc.) (<http://dx.doi.org/10.3145/epi.2014.jul.03>)

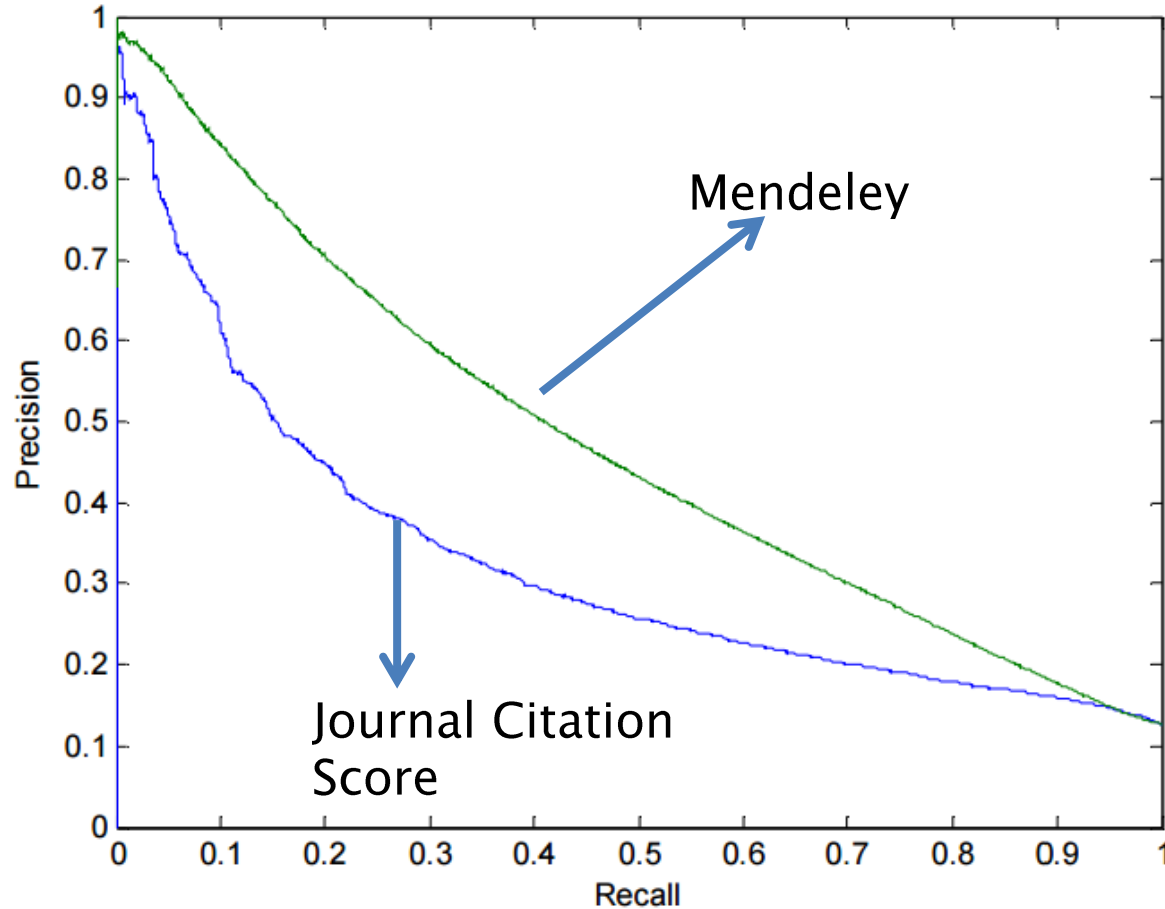
What can we actually do?



What can we actually do?

- Mendeley
 - *Indicators!* (same as with citations)
 - Filtering highly cited publications
 - Readership interests by types of users
- Altmetric.com
 - Basic indicators
 - Identifying topics with ‘social media interest’
 - Altmetric landscapes
 - Identification of ‘communities of attention’

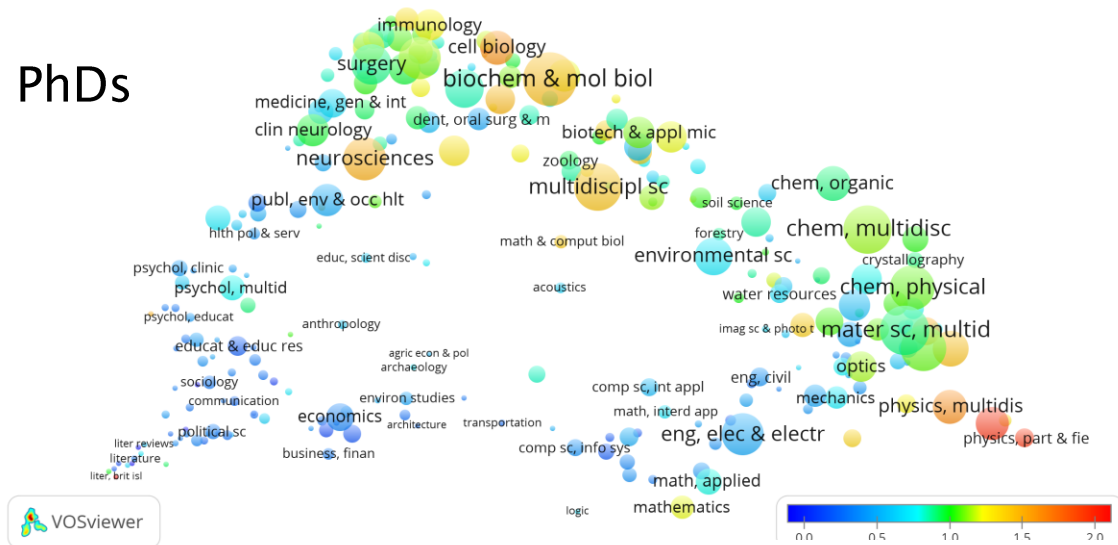
Filtering highly cited publications



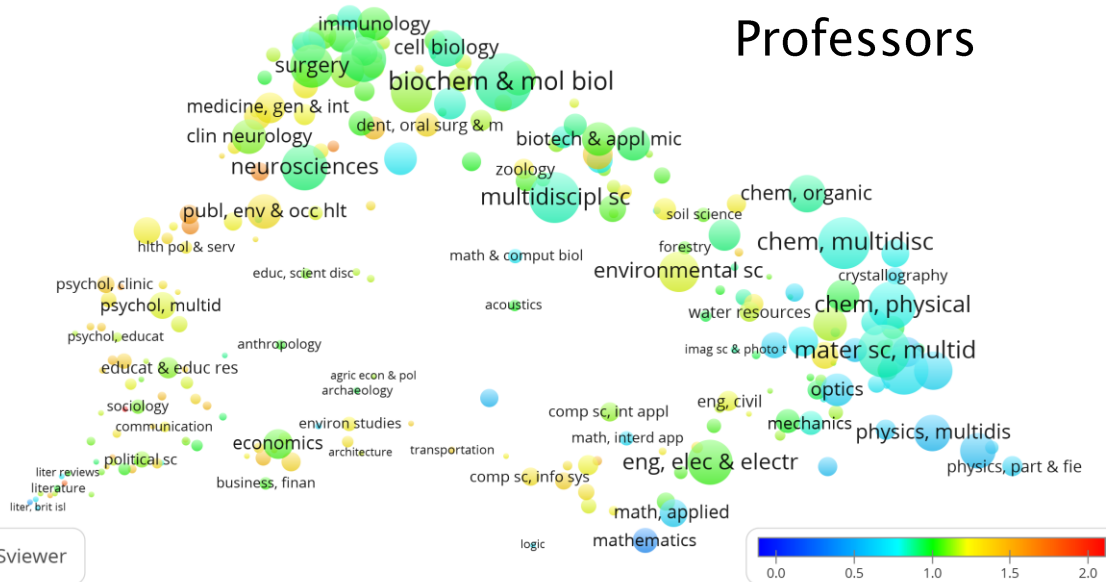
Readership activity by Mendeley users

<http://dx.doi.org/10.6084/m9.figshare.1041819>

PhDs



Professors



VOSviewer



VOSviewer

0.0 0.5 1.0 1.5 2.0

Basic indicators

- Counts and averages

Unit	p	p doi/pmid	pp doi/ pmid	ttw	tfb	tb	tn	tgp	tf1	tpd	twk
Africa	125801	104040	82.7%	190794	21504	6128	11294	2950	698	887	1249
EU28	1605420	1305386	81.3%	2034886	224366	67262	118568	40204	14106	4153	16006
USA	1686054	1281619	76.0%	3461185	356098	136678	263514	71995	23610	4964	22810

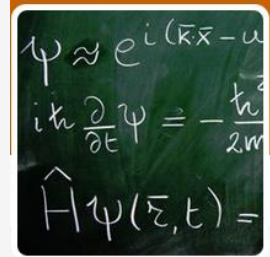
Unit	p doi/pmid	mtw	mfb	mb	mn	mgp	mf1	mpd	mwk
Africa	104040	1.83	0.21	0.06	0.11	0.03	0.01	0.01	0.02
EU28	1305386	1.56	0.17	0.05	0.09	0.03	0.01	0.00	0.02
USA	1281619	2.70	0.28	0.11	0.21	0.06	0.02	0.00	0.03

Basic indicators

- Coverage

Unit	p doi_pmid	pp (tw1)	pp (fb1)	pp (b1)	pp (n1)	pp (gp1)	pp (f11)	pp (pd1)	pp (wk1)
Africa	104040	27.02%	7.47%	2.73%	2.12%	0.98%	0.53%	0.64%	1.20%
EU28	1305386	28.50%	6.45%	2.71%	2.32%	1.22%	0.84%	0.25%	1.23%
USA	1281619	37.39%	9.62%	5.09%	4.48%	2.05%	1.42%	0.29%	1.78%

Communities of attention



Health Literacy

@Hlth_Literacy

Eclectic health info, Health Literacy Also
 @HIV_Insight @Prison_Health

📍 Honolulu, Hawaii

🌐 ht.ly/baITU

🕒 Joined September 2009

BlackPhysicists

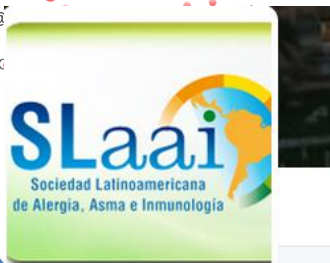
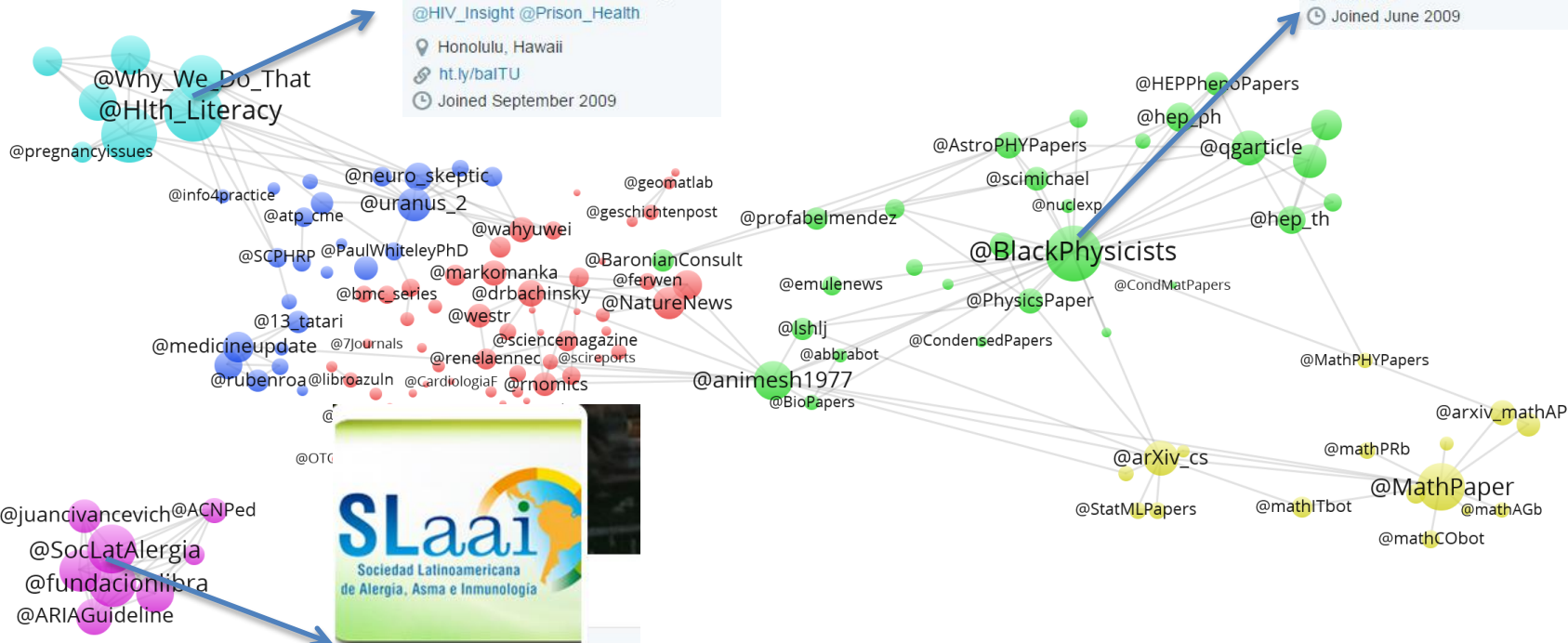
@BlackPhysicists

Promoting the professional well-being of African American physicists and physics students within the international scientific community and society at large.

📍 Arlington, VA USA

🌐 nsbp.org

🕒 Joined June 2009



SLaaI

@SocLatAlergia

Sociedad Latinoamericana de Alergia, Asma e Inmunología

📍 Iberoamérica

🌐 slaai.org

🕒 Joined September 2011

@juancivancevich@ACNPed
 @SocLatAlergia
 @fundacionlibra
 @ARIAGuideline

Analysis of users



Ludo Waltman

@LudoWaltman FOLLOWS YOU

Researcher at CWTS, Leiden University;
Editor-in-Chief of Journal of Informetrics



Paul Wouters

@paulwouters FOLLOWS YOU

Interested in how knowledge moves



Phil Davis

@ScholarlyChickn

I am an independent researcher and publishing consultant, a former postdoc in science communication and science librarian.



Zohreh Zahedi

@ZohrehZahedi FOLLOWS YOU

PhD Student at CWTS, Leiden University, The Netherlands. My PhD project deals with measuring research evaluation via [#Altmetrics.com](https://www.altmetrics.com) [#Mendeley](#) [#Impactstory](#)



CWTS Leiden

@cwtsleiden FOLLOWS YOU

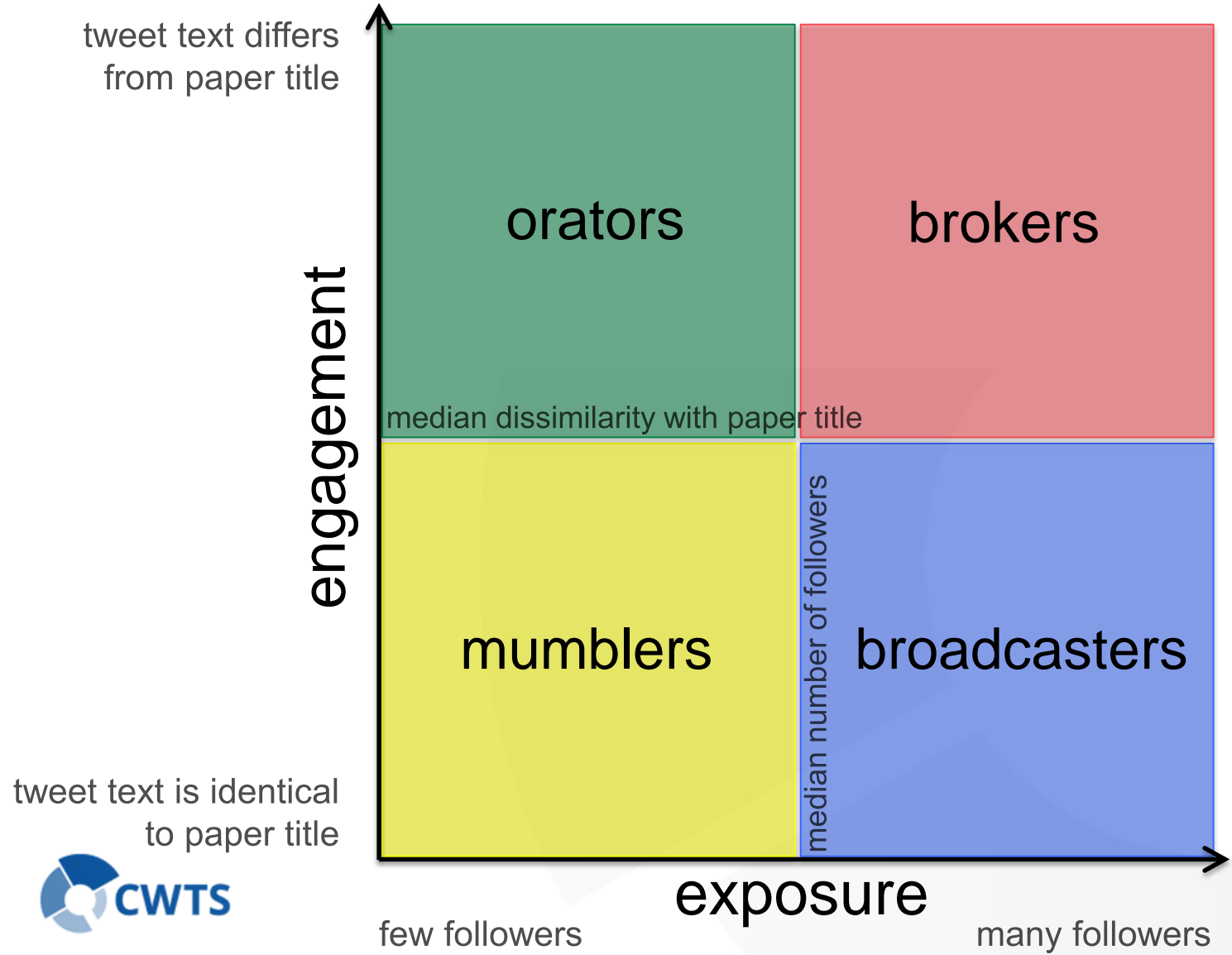
CWTS, Leiden University. Main activities: quantitative studies of science, scientometrics, bibliometrics, citation analysis, bibliometric mapping



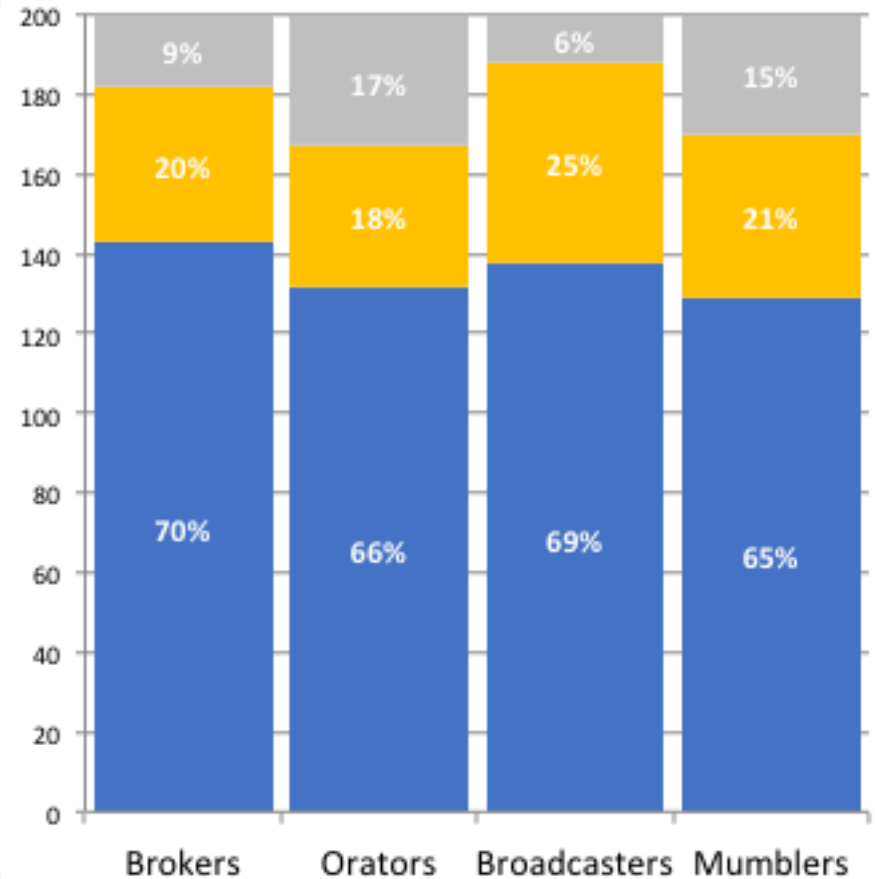
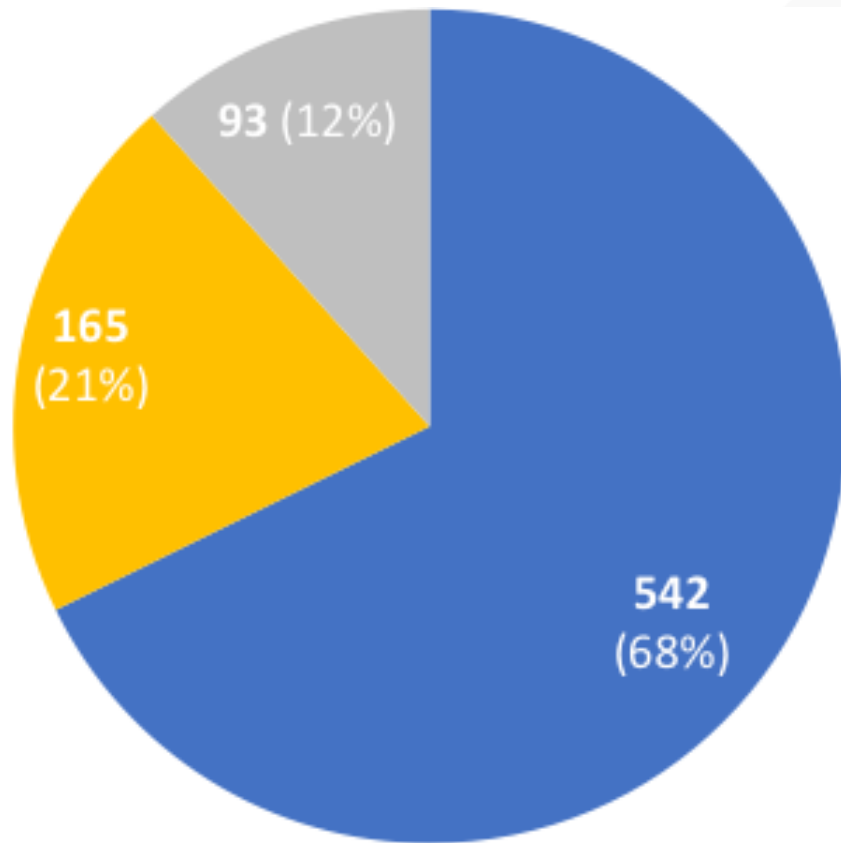
Ryan Noakes

@ryan_noakes

Composer, recording engineer, singer, occasional trumpet player, all around lover of all things music. And geekery. And I like kittens.

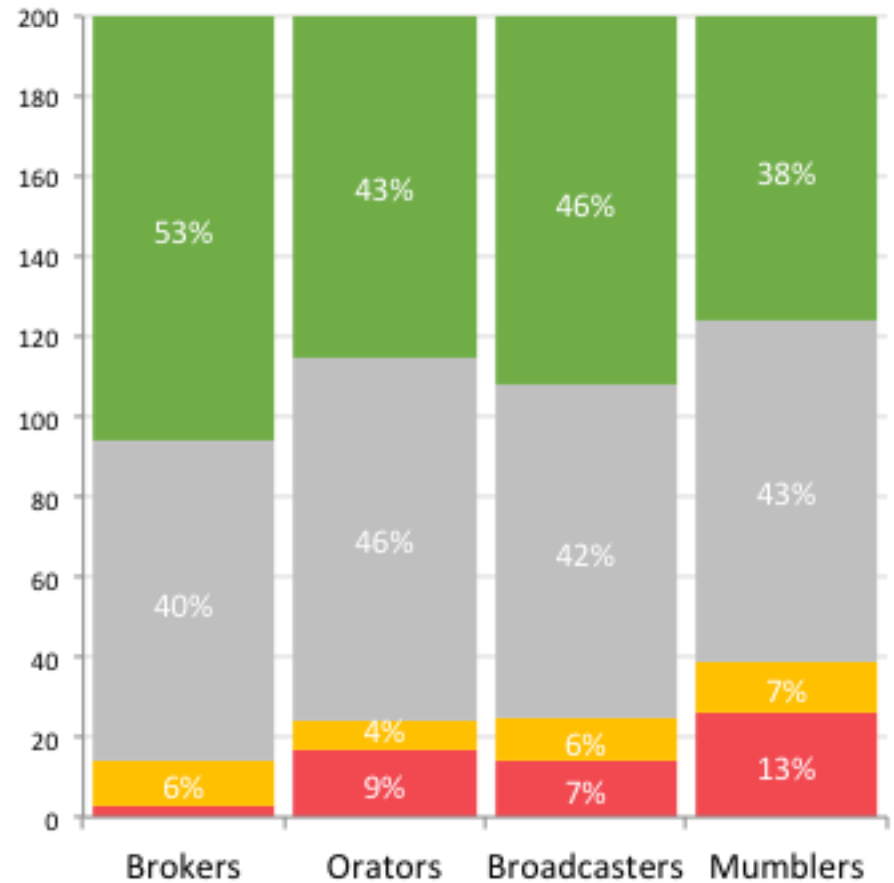
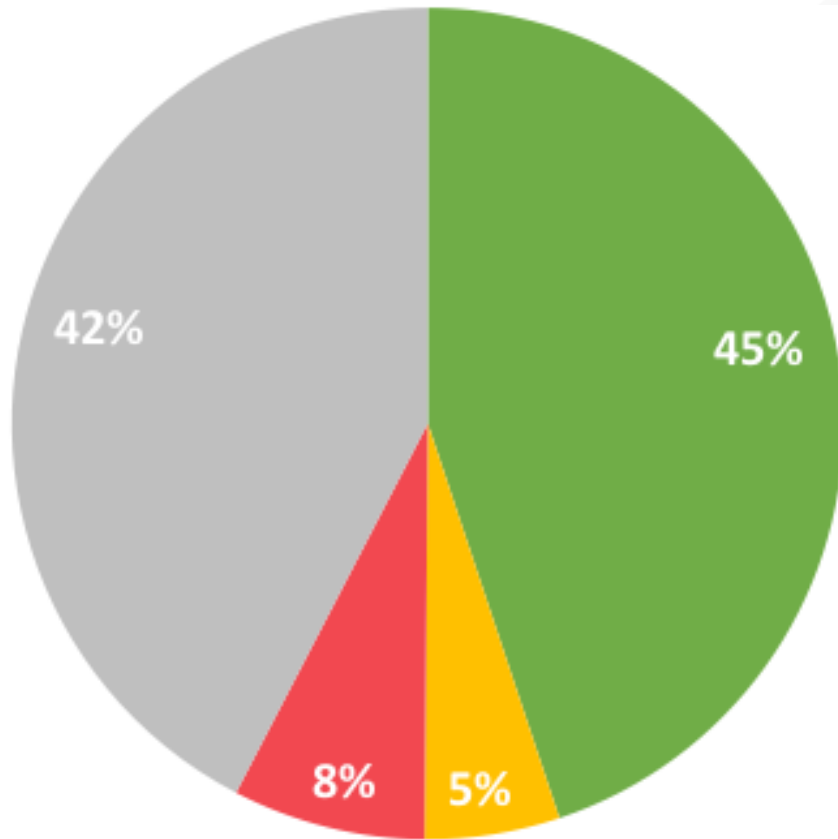


Qualitative analysis – Twitter accounts



■ Individual ■ Organization ■ Unable to tell

Automation of tweets



- Appears not automated
- Completely automated
- Mixed
- Unable to tell

Scholars on Twitter

- Matching of (disambiguated) authors with their Twitter accounts
 - Use of their real name in Twitter
 - Activity in Altmetric.com
- Scoring system:
 - Name matching (commonness of the names, first names, etc.)
 - Self-tweeting
 - Tweeting of the same: micro-topics, journals
 - Co-tweeting of the author with the paper (by someone else)
 - Other biographical information (URL, city, country, etc.)
- More than 300,000 scholars with a Twitter account worldwide (~2% of scholars)
 - Best previous approach (Ke et al., 2017): 45,876




Paul Wouters

[@paulwouters](#) FOLLOWS YOU

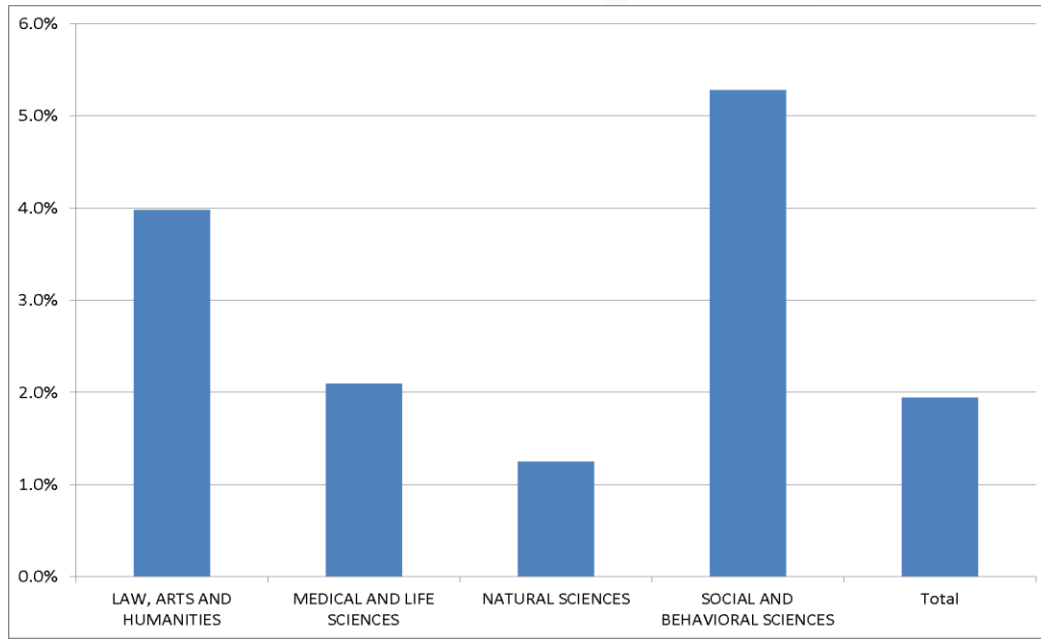
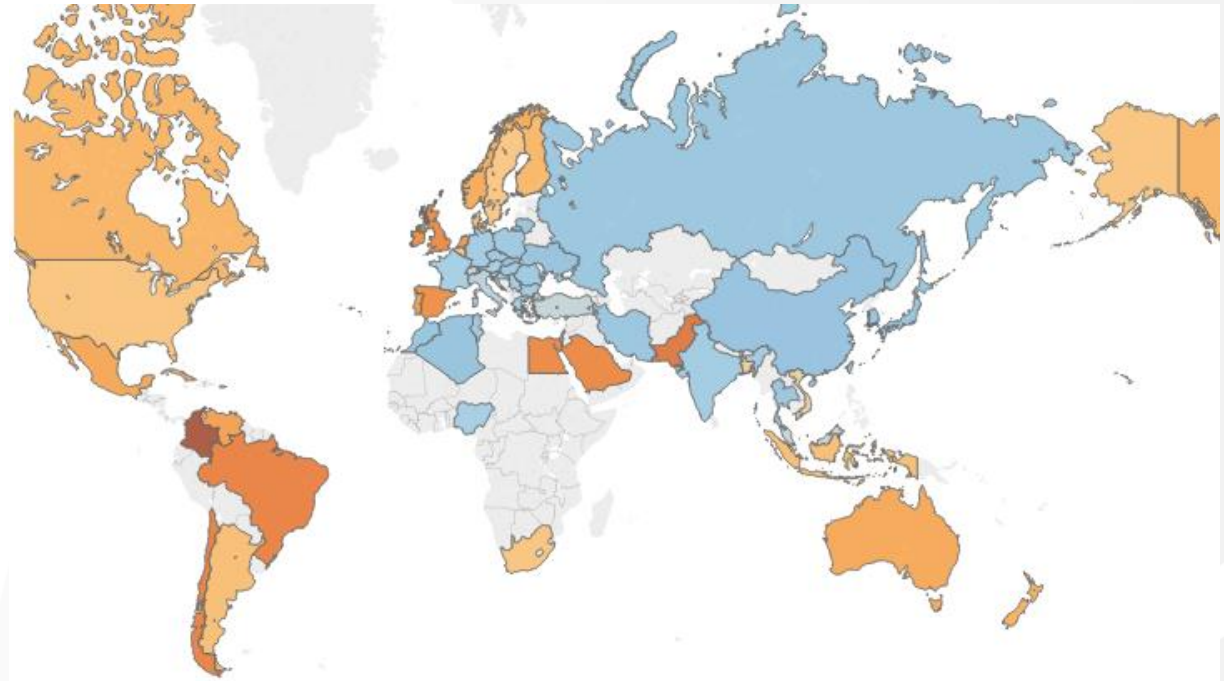
Interested in how knowledge moves

 [Amsterdam](#)

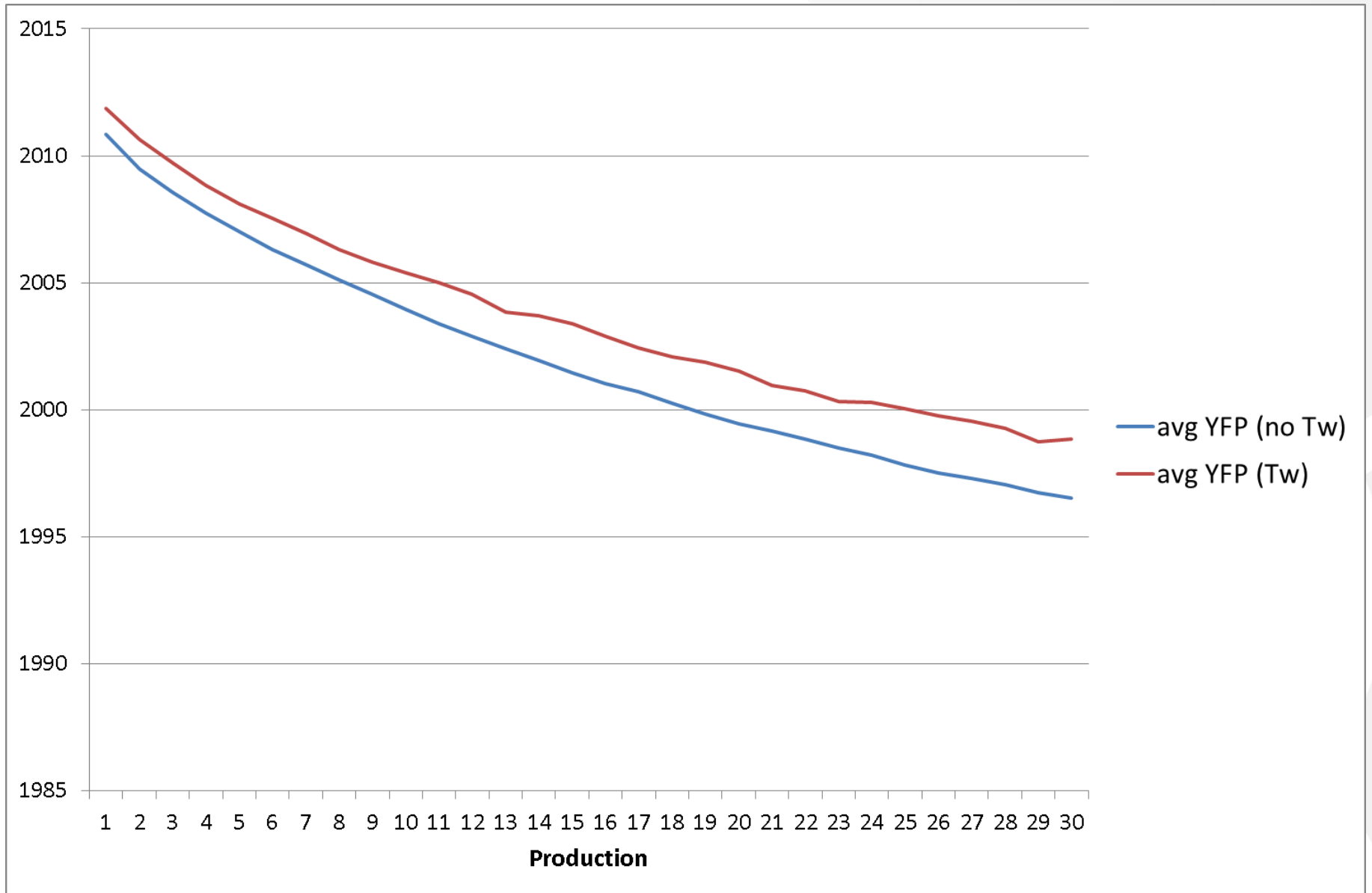
 [cwts.nl](#)

 Joined September 2008

Scholars with a Twitter account – world



Other demographics





Considerations on altmetric applications

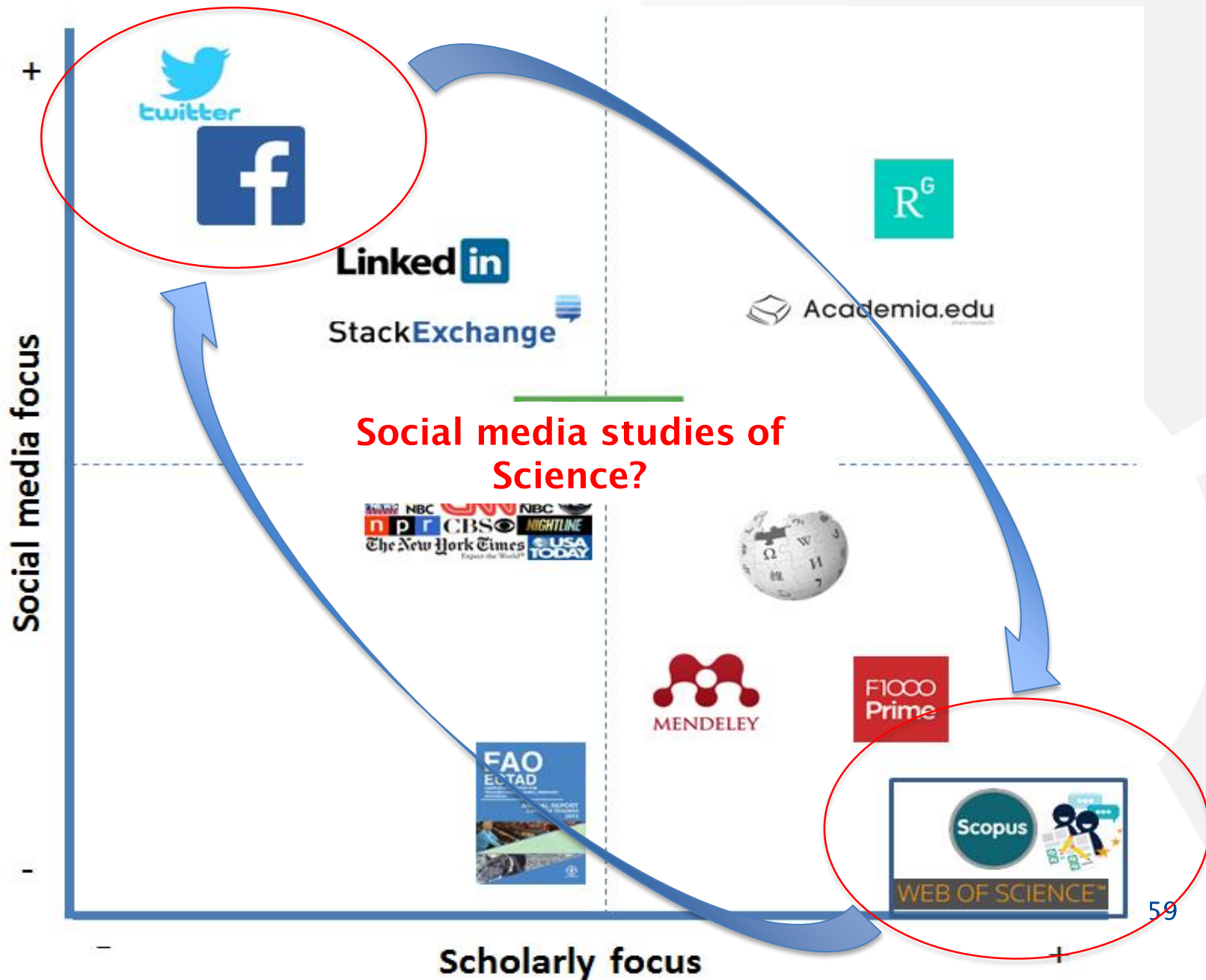
- ‘Descriptive altmetrics’:
 - More ‘contextual’ perspective
 - It is not about better/worse, but ‘who’, ‘how’, ‘when’ or ‘what’
- Basic indicators:
 - General overview on the reception and coverage of publications by different social media platforms
- Altmetric thematic landscapes
 - Open a window to social(-media) reception of science
 - Social(-media) interests on Science?
- Altmetric users analysis
 - Overview of the ‘communities of attention’ around publications and topics
 - Possibilities for:
 - Librarians: orientation towards relevant social media users important in their disciplines
 - Policy makers: knowledge on social media communities with interest for specific research topics
 - Researchers: crowdsourcing, citizen science, crowdfunding

Opportunities

- **Monitoring scientific communication strategies**
 - Are the publications of my unit being disseminated on social media?
 - How are scientific publications perceived by social media users?
 - What users and how are they receiving the research of my university?
Analysis of tweets, hashtags, characterization of users
 - **New typologies of impact** (social media attention, understanding of science, ‘misunderstanding’, etc.)
 - Identification of new forms of dissemination (e.g. videos, blogs, etc.)

- **Monitoring interactions between social media and scholarly entities**
 - Identification of scholarly entities on Twitter
 - Bridging bibliometrics and social media metrics
 - Analysis of scholars’ behavior on Twitter: topics, activities, interactions, etc.
 - **Monitoring ‘societal’ interactions?**

Towards something bigger?



Thank you very much!