



ISSI NEWSLETTER

QUARTERLY E-NEWSLETTER OF THE INTERNATIONAL SOCIETY FOR SCIENTOMETRICS AND INFORMETRICS
ISSN 1998-5460

#66 / VOLUME 17 NUMBER 2
JUNE 2021

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ISSI ELECTIONS 2021: A REPORT ON THE PROCEDURES AND RESULTS

The ISSI renews its board partially in every two years. After their 4-year-long mandates expired, Aparna Basu, Kevin Boyack and Vincent Larivière stepped down from the Board this year. In line with the Board's decision, the appointment of the Secretary-Treasurer has also ended this year. While the new Board members are elected for 4 years, the new Secretary-Treasurer is elected for a 6-year period.

The election procedure that followed consisted of two parts: nomination and voting. All members in good standing (i.e. those who have paid their membership fees until the beginning of the nomination turn) had the right to take part in the Elections. Members having the right to vote (except for those board members who stayed on the Board) became eligible candidates



**BALÁZS
SCHLEMMER**
election assistant

ISSI e-Newsletter (ISSN 1998-5460) is published by ISSI (<http://www.issi-society.org/>). Contributors to the newsletter should contact the editorial board by e-mail.

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as well automatically. Similarly to earlier elections (and considering the members' global whereabouts, which range to 43 countries at the moment), the Elections were carried out online. Anonymity was guaranteed throughout the procedures. All members in good standing had received detailed instructions about the Elections in e-mail.

ROUND 1: NOMINATION

The Nomination Round took place between 13 April and 03 May.

Roughly half (50.57%) of the members in good standing took part in the first round and they nominated 44 candidates for Secretary-Treasurer, together with no less than 117 (no typo: one hundred and seventeen) candidates for board members.

It occurred three times that nomination forms were sent repeatedly. No form arrived after the submission deadline. According to the Election rules, the invalid nomination forms were ignored when counting the results.

After the closure of the nominating round the nominees were asked if they would accept the nominations. See *Fig 1* for acceptances and rejections.

Following Aparna Basu's suggestion, all candidates were also requested to send a short introduction about themselves. To inform members and to facilitate decision making, these professional self-introductions were published on the voting form.

ROUND 2: VOTING

The Voting took place between 18 and 31 May. Once again, record high turnout was observed this time, too: 178 voting forms were received in the Election mailbox, out of which 1 form was invalid (it did not contain any data) and 26 forms turned out to be repeatedly submitted ballots. Just like in the nomination round, repeated submissions were counted only once (in case of repeated ballots only the last ones were taken into account). After filtering out these invalid submissions the Elections were closed with 151 valid ballots, which translates to an impressive turnout level of 57.41% – a new record again (*Fig 2*)!

RESULTS

After summing up the votes, the following results are hereby announced officially:

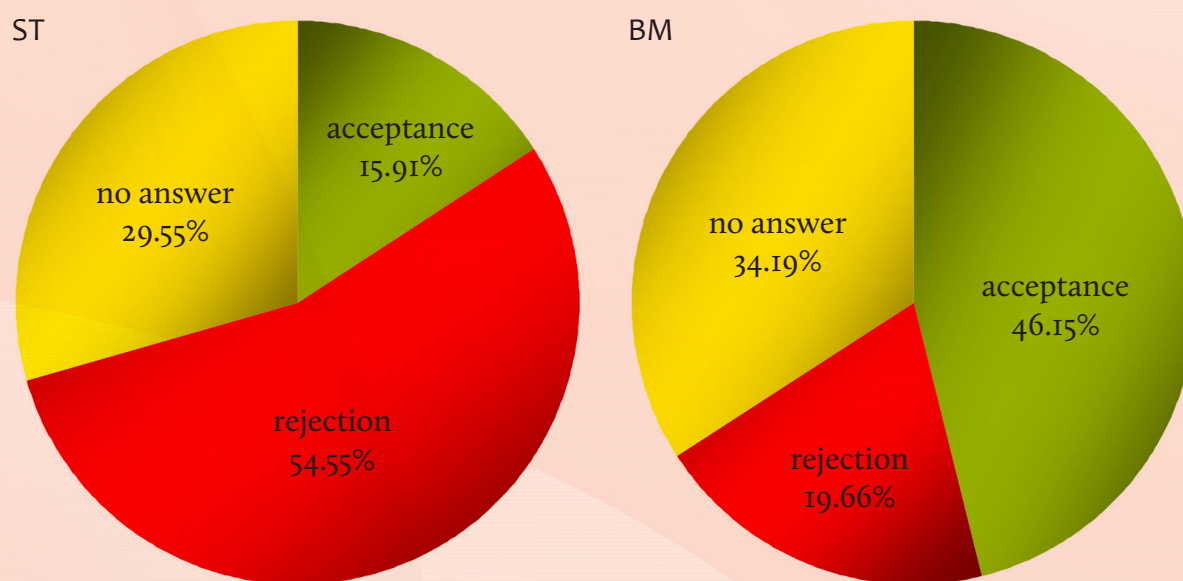


Figure 1 Acceptances and rejections of nominations for Secretary-Treasurer (left) and Board member (right)

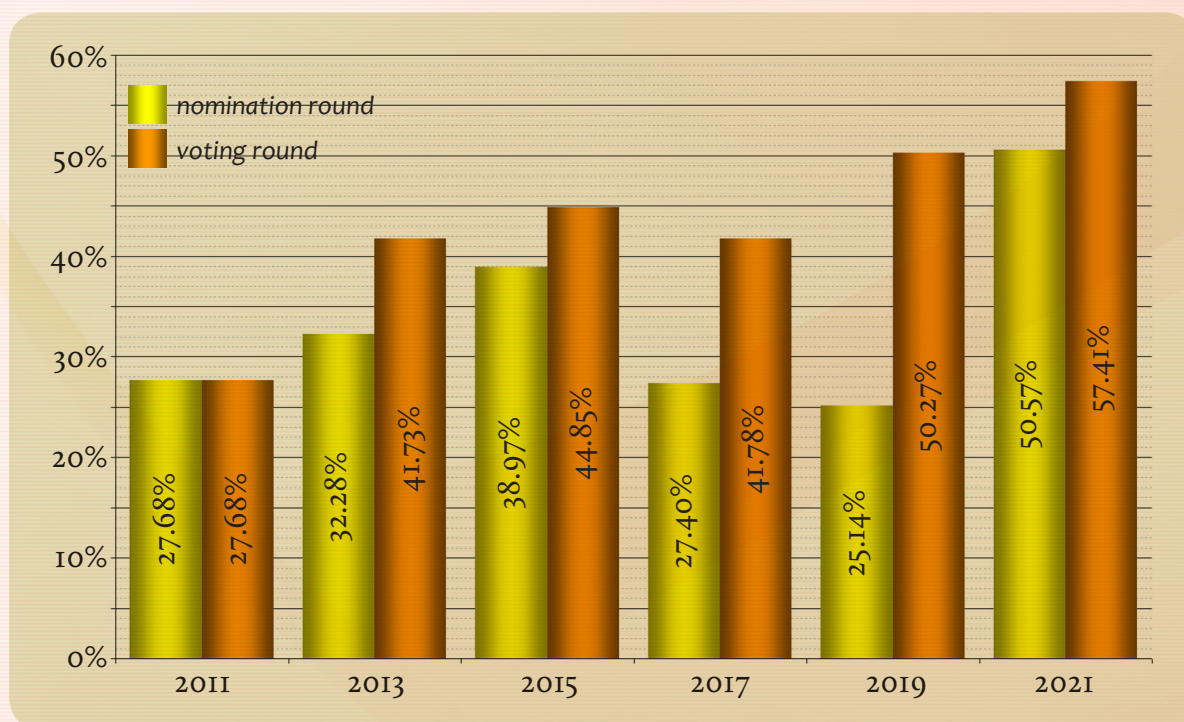


Figure 2 Nomination and voting turnout rates in the last six elections

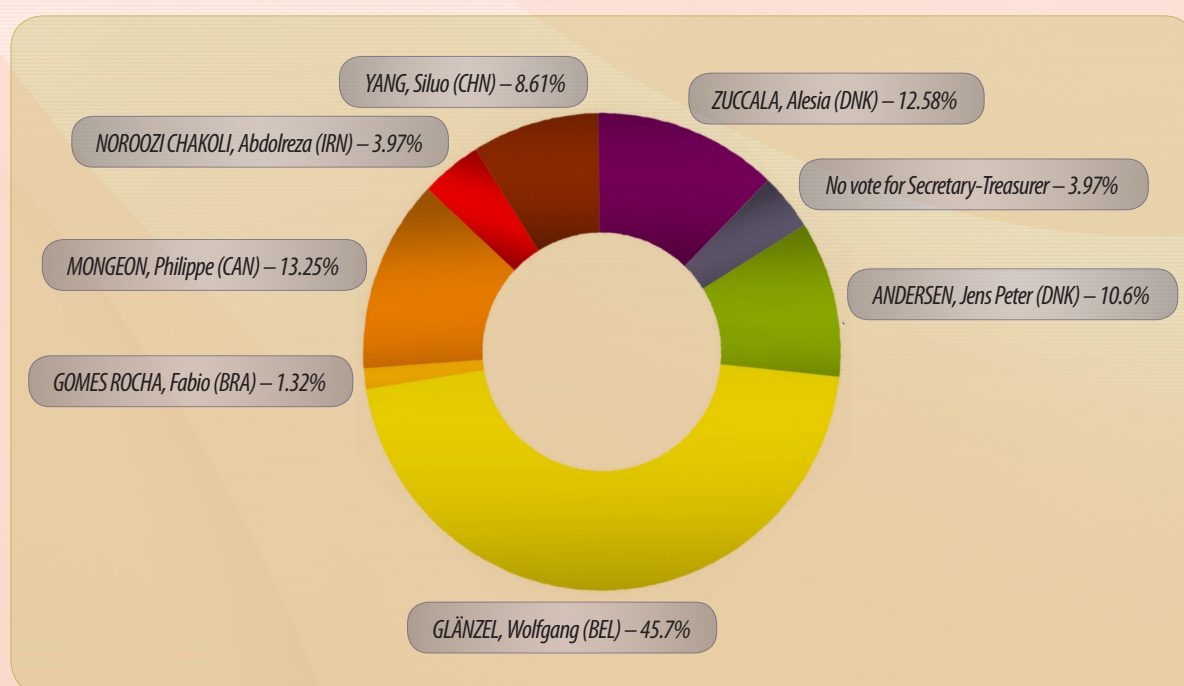


Figure 3a Results of the ISSI Elections in 2021 – Secretary-Treasurer

SECRETARY-TREASURER

It was for the first time in the history of ISSI that the ST position was also subject to direct election. (Previously to this, the ST was appointed by the Board.) Considering that the ISSI is registered in the Netherlands,

and therefore the Society's banking is also carried out in a Dutch bank, it could have caused a few technical issues to overcome if somebody from the other side of the world was elected for ST but apparently, the members placed their confidence in the work of the former Secretary-Treasurer.

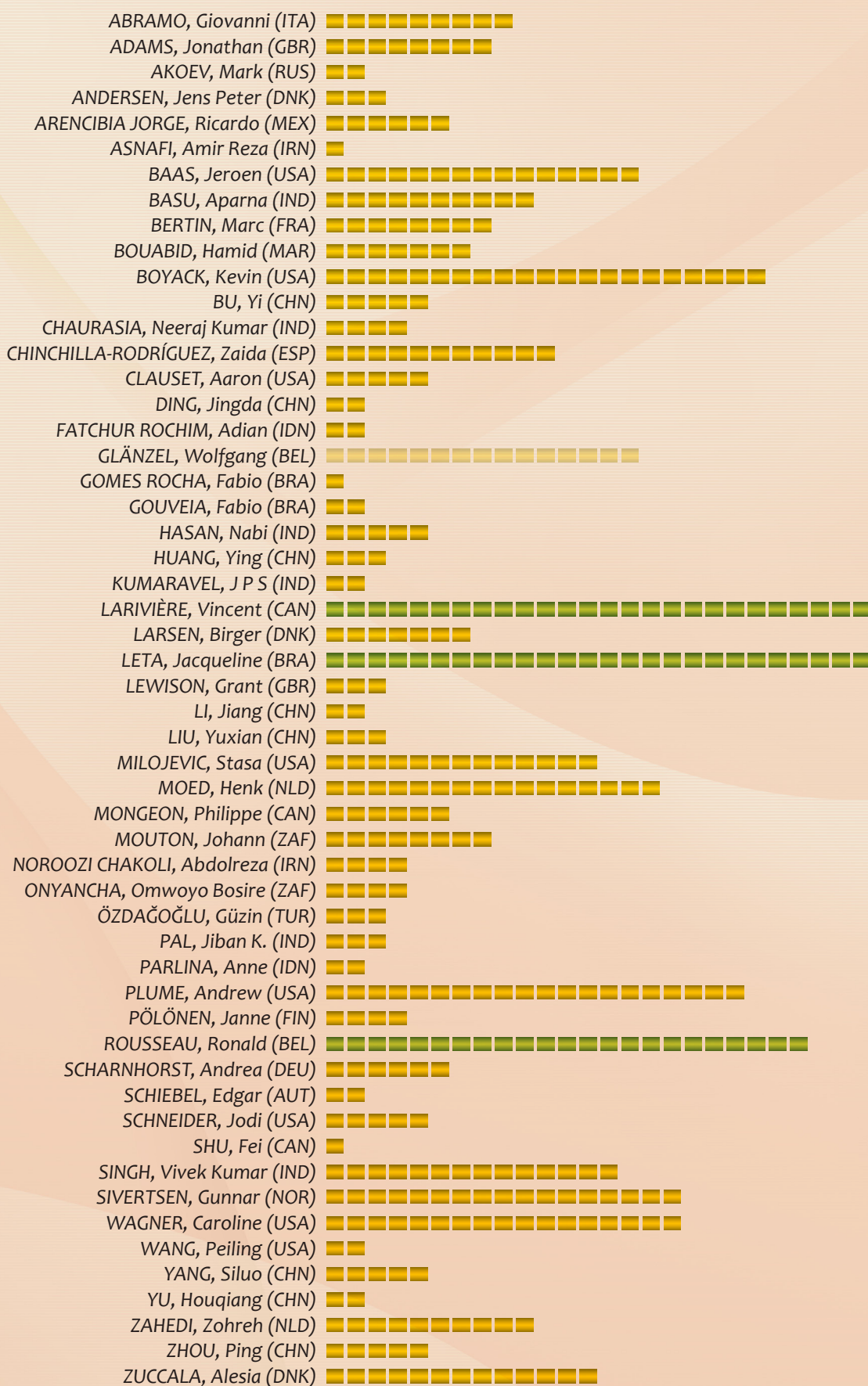


Figure 3b Results of the ISSI Elections in 2021 – Board members

er and re-elected Wolfgang Glänzel (BEL/DEU/HUN) to continue what he has been doing in the better part of the last two decades. See *Fig 3a* for the runners-up and their shares of the Election pie-chart.

BOARD MEMBERSHIP

The Secretary-Treasurer was not the only one who has become re-elected: it also happened to Vincent Larivière (CAN), who, just after he stepped down, ended up on top again, with 26 votes (6.21% of the votes in total). His top position in the voting is shared by Jacqueline Leta (BRA), who has also received 26 votes (6.21%), and they were closely (23 votes, 5.49%) followed by Ronald Rousseau (BEL).

See *Fig 3b* for the detailed results of all nominees who accepted their nominations for the voting round.

GEOGRAPHICAL AND INSTITUTIONAL QUOTAS

In addition to the direct election of the Secretary-Treasurer, the 2021 Elections had other novelties as well. Geographical (maximum 3 board members / continent) and institutional (maximum 1 board member / institute) quotas have been introduced in order to support geographical diversity and fair(er) representation of the 43 countries ISSI is currently having members from.

Institutional quotas had to be introduced to avoid that representatives of one

single institute is occupying the majority of membership seats, which may otherwise happen since the new institutional membership scheme was introduced. As a consequence, the quotas (as well as the most up-to-date state of our member database) will certainly need some further refinements in the future.

The outcome of the Nomination round had no decisive consequences for the outcome of the Voting turn and results remained below the thresholds, so that the quotas did finally not needed to be effectively applied.

Maxing out its allotment, Europe will be represented by three Board members; Asia, North America and South America will all be represented by one Board member each. (The President and the Secretary-Treasurer are exempt from the quotas.)

THANKS!

Finally, on behalf of the Board of ISSI, the Election Assistant would like to say thanks to the Board members stepping down for the work they have done, as well as to all the nominees who accepted their nominations for the Elections; and of course, I would also like to say thanks to all the members who participated in the 2021 Elections and made it possible to break a new turnout record again.

See you in 2023 again, when most probably you will be supposed to elect three new Board members and a new president!

ISSI PAPER OF THE YEAR AWARD 2021



VINCENT LARIVIÈRE

Chair, ISSI Paper of the Year Award 2021

The International Society for Scientometrics and Informetrics (ISSI) Paper of the Year award was established by the 2016 ISSI Board of Directors to stimulate and recognize high quality research in the field of scientometrics and informetrics. Previous awardees of the award are Jesper Schneider (2017) and This Bol, Mathijs de Vaan and Arnout van de Rijt (2019).

The 2021 Paper of the year committee was composed of Jesper Schneider, 2017 ISSI paper of the year awardee and professor at Aarhus University (Denmark), Ludo Waltman, Editor in Chief of Quantitative Science Studies and professor at Leiden University, Lin Zhang, ISSI board member and professor at Wuhan University, Kai Li, assistant professor at Renmin University of China, and Vincent Larivière, ISSI board member and professor at the University of Montréal and Chair of the com-

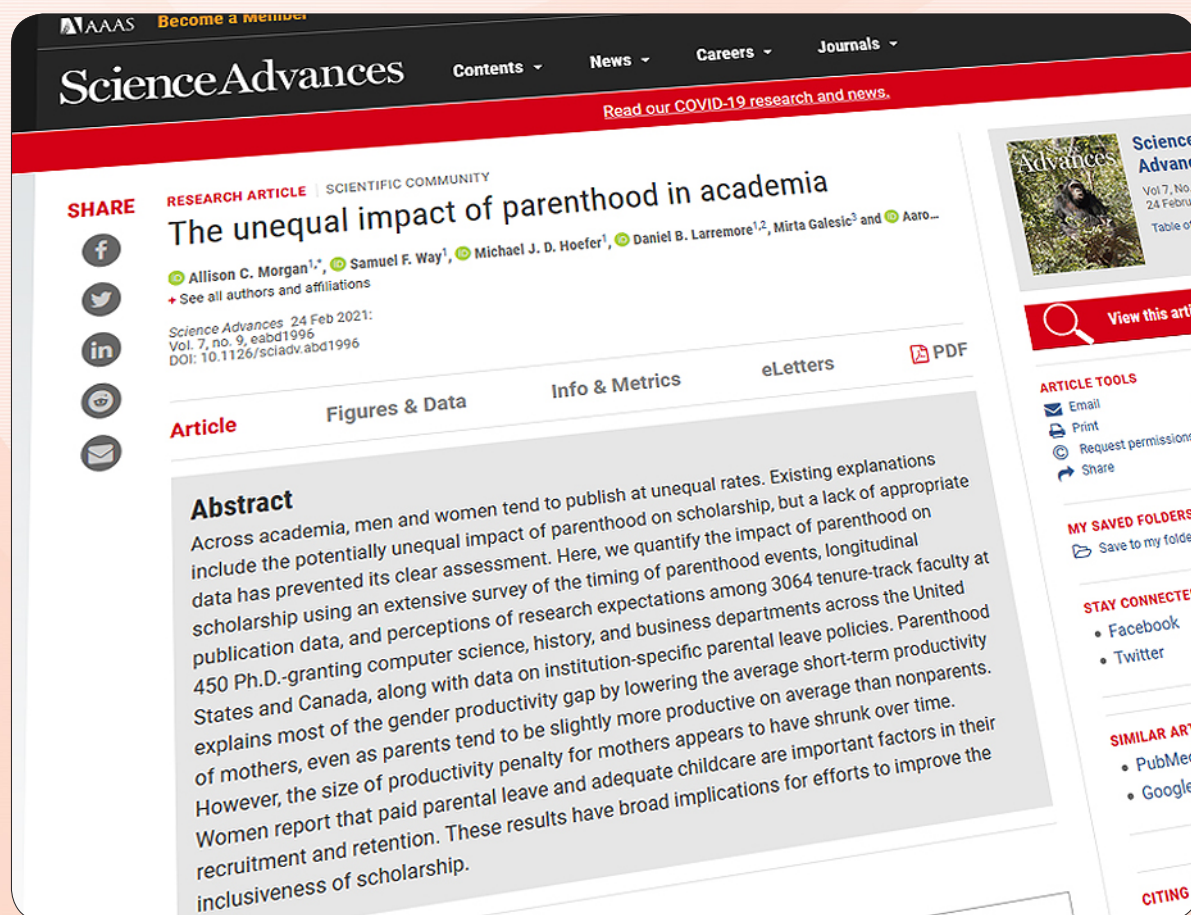
mittee. The committee had to review the 11 eligible submissions nominated by ISSI members. This was performed through what is still the gold standard in research evaluation: peer review. More specifically, three criteria were used to assess submissions: their novelty, the strength of their methodological approach, and their contribution to either theory, science policy or bibliometric methods.

After our evaluation, two papers stood above the others. The runner up paper, entitled “Mapping scholarly publications related to the Sustainable Development Goals: Do independent bibliometric approaches get the same results?” was authored by Caroline Armitage, Marta Lorenz and Susanne Mikki from the University of Bergen Library, and published in Quantitative Science Studies. It presents a systematic comparison of two approaches for

identifying scientific publications related to the United Nations Sustainable Development Goals. The committee was highly impressed with the quality of the scientometric analysis, the high policy relevance of the results and the clear discussions of the limitations of scientometric methods.

There was unanimous agreement in the committee on the winning paper. The 2021 paper of the year is entitled “The unequal

erage, less productive than their men colleagues—a situation that was made worse by the pandemic. To understand the causes of this research productivity gap, Dr. Morgan and her colleagues created a dataset of more than 3,000 faculty across Canada and United States, along with information on parenthood and career age, as well as the 100,000 scholarly papers they contributed to. Their paper convincingly shows



impact of parenthood in academia”, and was authored by Allison Morgan, Samuel F. Way, Michael J. D. Hoefer, Dan Larremore, Mirta Galesic and Aaron Clauset. Published in Science Advances, the paper tackles an important issue for the scientific community: the research productivity gap. Over the last decades, dozens of papers have shown that women were, on av-

how parenthood explains most of the gap in research productivity, and provides empirical data that can help shape policies that make science most hospitable to all. On behalf of the 2021 Paper of the year committee, would like to congratulate Dr. Allison Morgan and her colleagues for this important contribution to scientometrics and informetrics.

CALL FOR PAPERS

BENEFITS AND CHALLENGES OF COLLABORATION IN RESEARCH

INVESTIGATING THE MANIFOLD ASPECTS OF MONO-, INTER- AND TRANSDISCIPLINARY COLLABORATION

VIRTUAL WORKSHOP ORGANISED BY

- The German Centre for Higher Education Research and Science Studies (DZHW)
- The Heinrich Heine University of Düsseldorf, Faculty of Arts and Humanities, Department of Communication and Media Studies, and
- The Stifterverband

04 NOVEMBER, 2021

Increasing interorganizational, national and international, and inter- and transdisciplinary collaboration is a megatrend in science (Wagner & Leydesdorff 2005; Bozeman et al. 2013; Bozeman & Boardman 2014; Hall et al. 2018). The number of papers published by teams in co-authorship is steadily increasing, with more than one-third of all papers being published by international teams (Huang 2015; Nabout et al. 2015; Wagner et al. 2015). Since scientific collaboration is considered vital to address complex challenges in research specifically and more generally for society as a whole,

■ IMPORTANT TO KNOW

Location: Virtual workshop, hosted by the DZHW

Date: November 4th, 2021

Organisation: Malte Hückstädt
Melike Janßen
Axel Oberschelp
Zhao Qu
Carina Weinmann

Contact: Dr. Axel Oberschelp,
collaboration-in-research@dzhw.eu

it has become an essential part of knowledge production, being associated with various advantages (e.g. synergies, pooling of resources and expertise). Working in diverse teams across disciplinary, organizational, or cultural boundaries is expected to increase the likelihood of discovery and innovation in science and high-impact research (Wuchty et al. 2007; Uzzi et al. 2013). However, scientific collaboration is also facing manifold challenges (e.g. transaction costs, trust, power struggles and reciprocity among collaborating partners, or heterogeneity of disciplinary and epistemic cultures). Further, as institutions and individuals compete for resources and reputation, the question arises how collaboration is possible under conditions of prevailing competition in science (e.g. van den Besseelaar et al. 2012).

To date, however, little research has examined the determinants of successful collaboration – and its effects – in research. Accordingly, central concerns requiring attention and desiderata include the following:

- ▶ How can collaboration be *successfully organized* in large teams and what are the *boundary conditions* for successful research collaboration?
- ▶ Which *collaboration problems* arise and what are their causes?
- ▶ How can these problems be *solved at different levels*?
- ▶ Which *effects* do they have on the success and productivity of research collaboration and how do actors *deal* with these problems?
- ▶ Which *specifications* can research funding agencies apply to facilitate collaborative research and implement appropriate governance structures?

Studies that address the manifestations, conditions, challenges, and effects of scientific collaboration are methodologically based on different levels and on different approaches. An important approach to detecting collaborative relationships and analysing the impact of collaboration via co-authorships is bibliometric analyses

(Subramanyam 1983; Gänzel et al. 1999; Gänzel 2002). However, there exist internal dynamics of collaborative relationships and forms of collaboration that cannot be analysed on the basis of publications and citations (Shrum et al. 2001; Laudel 2002; Shrum et al. 2007; Bozeman et al. 2016; Bozeman & Youtie 2016; Dusdal & Powell 2021). For this purpose, besides bibliometrics different research approaches are of interest for contributions to the workshop, such as in-depth case studies, interviews, and surveys that embrace the perspectives and experiences of scientific team members or the actors involved in the implementation and management of collaborative research projects.

The one-day workshop is dedicated to scientific collaboration as an interdisciplinary object of investigation. It aims at bringing together scholars that study the practices, outcomes, and effects of collaboration from different disciplinary and interdisciplinary perspectives and with different methodological approaches. With this in mind, we welcome theoretical and empirical submissions that focus on the above and related issues. We particularly welcome micro-level perspectives that focus on the internal dynamics within research networks and mixed-methods approaches that link patterns of collaborative behaviour on both the meso and micro level (e.g. in terms of inter- / transdisciplinarity or internationality) with these internal dynamics as well as submissions that centre on the interplay between science policy and science production in a macro level perspective. In addition to scientific findings, concrete practical suggestions for improving collaboration in research alliances are also of interest.

Workshop presentations should be approximately **20 minutes** in length and will allow 10-15 minutes for discussion. Working language of the workshop is English. Please send your proposals to the following e-mail address by **31 July 2021**:
collaboration-in-research@dzhw.eu

Your submission should include:

- a) an abstract of the paper that will be presented (up to 500 words excluding references);
- b) a short biographical note (up to 100 words).

Confirmation about acceptance will be sent out by **August 15th, 2021** at the latest. It is intended to submit a Special Issue with papers from the workshop. Selected papers will be invited to participate in the Special Issue after the conference. We are looking forward to receiving your contribution and to welcoming you on **November 4th, 2021** to our virtual workshop.

The workshop is organized by the project „Determinants and effects of cooperation in homogenous and heterogeneous research clusters“ (DEKiF), funded by the Federal Ministry of Education and Research (BMBF). Participating researchers: Malte Hückstädt, Melike Janßen, Prof. Dr. Monika Jungbauer-Gans, Prof. Dr. Bernd Kleimann, Dr. Axel Oberschelp, Dr. Zhao Qu, Prof. Dr. Martin Reinhart, Prof. Dr. Gerhard Vowe, Dr. Carina Weinmann.

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CALL FOR PAPERS

THE 26th NORDIC WORKSHOP ON BIBLIOMETRICS AND RESEARCH POLICY

SDU ODENSE, ODENSE, DENMARK

3-5 NOVEMBER, 2021

The 26th Nordic Workshop on Bibliometrics and Research Policy will be held in Odense at SDU, Campusvej 55, 5230 Odense M, on November 3-5, 2021.

The Nordic Workshop on Bibliometrics and Research Policy has been an an-

nual event since its beginning in 1996. The event alternates between locations in Denmark, Finland, Iceland, Norway, and Sweden. The purpose of the Nordic Workshop on Bibliometrics and Research Policy is to link bibliometric research with research

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policy, to present the newest bibliometric research in the Nordic countries, and to create better links between the bibliometric research groups and their PhD students.

The workshop is open to participants from any nation and will be held in English.

MORE INFORMATION:

<https://www.sdu.dk/en/bibliotek/kurser+og+events/aktiviteter/nwb2021>

Twitter: #NWB2021

IMPORTANT DATES

- Deadline for submission of abstracts (posters and papers): August 16, 2021. The deadline will not be extended due to the deadline for hotel reservations at a reduced price. The authors will be notified of acceptance by 20 September, 2021.
- Deadline for booking Hotels with SDU discount: 26 September, 2021.
- Deadline for registration to NWB2021: 18 October, 2021.

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INTRODUCING THE DEREK DE SOLLA PRICE AWARDEE OF 2021

INTERVIEW BY TON VAN RAAN



The awarding ceremony of the Derek de Solla Price Memorial Medal has become an essential part of the programme of ISSI conferences since the foundation of the Society in 1993. The Price Medal was conceived and launched by Tibor Braun, founder and Editor-in-Chief of the international journal Scientometrics, and is periodically awarded by the journal to scientists with outstanding contributions to the fields of quantitative studies of science. This year's awardee is Ludo Waltman (professor of Quantitative Science Studies, deputy director at the Centre for Science and Technology Studies, Editor-in-Chief of the journal Quantitative Science Studies). Congratulations to the award-winner!

LUDO WALTMAN

■ **Dear Ludo you are an economist by training, and also a PhD (Erasmus University Rotterdam) in economics, how did you become a bibliometrician in Leiden?**

→ When I was doing my PhD research, I was lucky to have a friend and colleague, Nees Jan van Eck, who was working on a PhD project in bibliometrics and with whom I started to work together. In this way I became increasingly fascinated by bibliometric research. By participating in a bibliometrics course organized by CWTS, Nees and I started to develop

connections with CWTS, which eventually resulted in both of us joining the center and becoming professional bibliometricians. Moving from economics to bibliometrics has been a decisive step in my scientific career, and I feel very fortunate that I have been given so many opportunities at CWTS not only to develop new research ideas but also to develop myself as a person.

■ **Two years ago you have been appointed to professor of quantitative science studies at a young age. In addition deputy**



director of CWTS. That comes with a lot of responsibility. How do you think about that, and how do you deal with it?

→ Indeed I feel that all of this brings quite a heavy responsibility. On the one hand, this is a responsibility for my research group at CWTS and for CWTS in general, where I try to stimulate a culture in which we emphasize the importance of collegiality, collaboration, openness, and critical debate. While I see this as a significant responsibility, I am in the privileged position of working together with many highly talented colleagues

with the field of neurosurgery in Leiden as the awakening process. What are the consequences of these new developments?

→ In the past decade, we have made important advances in thinking more systematically about the calculation of bibliometric indicators. While I am proud of my contribution to these technical developments, I believe the most important step that we have made is the development toward a more careful reflection on where and when the use of bibliometric indicators is appropriate or not. In my view, the Leiden Mani-

with whom I can share this responsibility.

On the other hand, I feel that my responsibilities extend beyond CWTS. Building on the research that I do, I believe I have a responsibility to contribute to improving the way scientometrics is used in practice, and more generally to trying to improve the way the research system is organized. I hope I manage to find a good balance between doing solid and innovative research in quantitative science studies and contributing to positive change in the research system.

■ From the beginning you played a crucial role in changing the basics of bibliometric indicators. For instance, a new way of calculating the 'crown indicator' and new insights in the way it can be applied for research evaluation in smaller research fields,

festo and other related initiatives have shown that taking extreme positions (either pro or contra) in debates about the use of bibliometric indicators is not very helpful. There is a middle ground in which bibliometric indicators can be used productively and responsibly, and we are developing an increasingly sophisticated understanding of what this middle ground looks like.

■ **An important methodological issue is that correlation is not the same as a causal relation. Where in scientometrics does this play a role, and what are possible solutions?**

- Indeed correlation does not imply causation, and since most research in quantitative science studies is of an observational nature, it is usually very difficult to demonstrate that certain relations are of a causal nature. Most researchers are aware of this, but I am concerned about the way in which research is translated into policy. This is a process in which the limitations of scientific studies are often disregarded and in which questionable interpretations of scientific studies are sometimes used to give support to a particular policy perspective. This is happening quite regularly in science policy debates, for instance in debates about open science and about diversity and inclusion in science.

An obvious solution is to carry out experimental rather than observational studies, but this is very challenging. A partial solution is the use of causal inference approaches in observational studies. Such approaches enable researchers to think more systematically about questions related to causality. My CWTS colleague Vincent Traag is doing very interesting work in this area. However, I believe we also need to rethink at a more fundamental level what types of evidence are needed to support science policy. Do we always need causal evidence to support policy making? And what does causality actually mean in the

context of a specific science policy problem? My perspective is that the more qualitatively oriented research approaches used by some colleagues at CWTS are just as important to provide robust evidence for science policy as the quantitative approaches that I typically use myself.

■ **You are a big proponent of openness of bibliographic metadata and even founded a new journal, Quantitative Science Studies, when the publisher of the journal you were editor-in-chief of did not want to support a more open way of working. What do you think of the latest developments related to openness of bibliographic metadata, also from the perspective of the increasing number of new databases with more and more but often unconnected information?**

- Full openness of the metadata of scholarly outputs is, in my view, a crucial step toward more responsible ways of doing scientometrics. It is a prerequisite for making scientometric analyses more transparent, more pluralistic, and more reproducible. Most importantly, it will help create an equal playing field in which everyone in the research system has access to the same data, so that we can have democratic debates about what the data does and does not tell us. Having such debates is impossible if some actors have access to much more data than others.

It is exciting to see the important developments toward full openness of bibliographic metadata that have taken place during the past few years. Clearly things are moving in the right direction, and I consider this to be an irreversible trend. However, we need to be aware that openness comes in many forms, some of which are more attractive than others. It is essential to think carefully about the way open infrastructures are organized and to make sure the interests of all relevant stakeholders are given appropriate consideration.

■ **What is your opinion on the interdisciplinarity of the field of scientometrics? Derek de Solla Price loved the ‘physical approach’ and also at CWTS this has been a traditional research line with topics such as fractal structures of co-citation clusters and models for the distribution of citations over publications and for the origin of power laws. How do you look at this?**

→ The interdisciplinary nature of the field sometimes poses challenges, but I believe we should embrace it, be open to each other’s perspectives, and try to learn from each other. The ‘physical approach’ indeed goes back all the way to Derek de Solla Price, and of course, Ton, you have also played an important role yourself in the development of this approach. Nowadays we see a resurrection of the ‘physical approach’ under the label ‘science of science’. Many scientometricians are critical about this development, often for reasons that I understand very well and that I sympathize with. However, I do not find it very helpful to just be critical. I believe it is more productive to see this development as an opportunity to broaden and diversify our community and to engage with new types of ideas.

The same applies to other developments, such as the contributions made to scientometrics by researchers that are sometimes referred to as ‘amateur bibliometricians’. Rather than just being critical about the contributions these researchers make, I believe we should recognize the important role these researchers can play in connecting ideas developed in the scientometric community to the daily life of researchers active in all kinds of different research fields and different parts of the world.

■ **Your work with Nees Jan van Eck on mapping and visualization of science and particularly the development of the VOSviewer has attracted a lot of attention, is widely used, extremely highly**

cited and it plays a crucial role in scientometrics nowadays. What are your plans with Nees to further develop visualization of science?

→ I am really proud of the work Nees and I have done in the area of scientometric visualization, and especially of all the efforts we have made to develop VOSviewer, where in particular Nees has done a lot of work. The immediate next step will be the release of VOSviewer Online, a special version of VOSviewer that runs in a web browser and that can be embedded in websites and online dashboards.

Scientometric information is often presented in a highly aggregated form in numerical indicators, and almost by necessity one loses a lot of valuable information in such indicators. Scientometric visualizations offer a less reductionistic perspective on scientometric information, especially when a visualization is made available in an interactive way and users have the possibility to explore the data underlying the visualization. This enables users to critically reflect on what a visualization does and does not tell them. I refer to this approach to scientometrics as contextualized scientometrics. In the future I hope we will increasingly be able to use VOSviewer to promote the idea of contextualized scientometrics.

■ **What is at the moment your favorite research topic?**

→ At the moment I am especially interested in studying the way the scholarly communication system is organized, and in particular in studying the many ongoing developments in scientific publishing and peer review. I believe that new approaches to the dissemination and evaluation of research provide important opportunities for improving the research system. For instance, many researchers seem frustrated by the prevailing approaches to peer review, which are quite rigid and bureaucratic. By making

peer review more open and transparent, I think there are possibilities to turn peer review into a constructive dialogue between researchers that is intellectually inspiring for everyone involved. Researchers may then be intrinsically motivated to participate in peer review rather than perceiving peer review primarily as an obstacle and a burden.

■ **Last question, but certainly not the least one. You are a passionate and successful researcher. But there is more in life than scientometrics, you also have a family with young, growing children. It is absolutely no small task to combine work and family. How do you feel about this?**

→ My girlfriend Eline and I have two children, who are now 8 and 11 years old. As many of us know from personal experience, combining a professional career with young children can be challenging. I am in the fortunate situation that my responsibilities at CWTS enable me to work in a relatively flexible way. Nevertheless, I realize that I work quite a lot of hours and that I have been traveling quite

a lot, causing me to be away from home relatively often. This has sometimes put pressure on the family, and especially on Eline, who was taking care of the children on her own when I was traveling.

The pandemic has made me more aware of the importance of spending time at home with the family, and it has also taught me that there often is no necessity to travel. While it is great to meet colleagues and collaborators in person, there are many situations in which the added value of meeting each other in person is limited, and in these situations meetings can easily be organized virtually. During the past year, I have learned that virtual meetings have many advantages. They are less harmful for the environment, they are more inclusive, since they allow people to participate that are unable to travel, and they put less pressure on people's personal lives. I believe we all need to think very carefully about the way in which we are going to organize future meetings and events. Going back to the situation before the pandemic is not an option for me. I will drastically reduce the amount of traveling I do. I have already promised my family I will spend more time with them.