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Monday, July 23rd

Bibliometrics Reviewed: History, Institutionalization, and Concepts
Stefan Hornbostel, German Centre for Higher Education Research and Science Studies (DZHW), Germany

The emergence of bibliometrics is closely linked to the growth of scientific information in the 20th century and to what de Solla Price called the evolution from "little science to big science". Initially, bibliometrics and its early concepts were oriented towards library access, bibliographic databases, and information services. However, since the 1960s other disciplines, especially the sociology of science, inspired the development of a new and interdisciplinary understanding of bibliometrics. In the 1970s and 1980s the increasing information needs on behalf of science policymakers boosted the institutionalization of bibliometrics as an own field of research, while at the same time this new application context necessitated new concepts. Little by little, a specific bibliometric methodology aiming to be suitable for today's applications such as formula-based funding systems, assessments, evaluations etc. came into being. The lecture will present this development process and, thereby, demonstrate common concepts of bibliometrics.

Introduction to Bibliometric Data Sources (Part 1 and Part 2)
Wolfgang Glänzel, Centre for R&D Monitoring (ECOOM) & Dept. MSI, KU Leuven, Belgium
Juan Gorraiz, Bibliometrics and Publication Strategies, University of Vienna, Austria

This talk is about the specific requirements for bibliographical data sources to be met in regard to their suitability for bibliometric application. Furthermore relevant issues like coverage, representativeness and selection criteria are considered.
Any appropriate bibliography can potentially serve as data source for bibliometric purposes, however, comparative studies and large-scale analyses require large standardized data sources like bibliographic databases.
After providing some background information, the main features of bibliographic databases are discussed with special focus on the question, which of them are useful, essential or even indispensable for bibliometric use (most databases are rather designed for information retrieval). In particular, the pros and cons of the three major multidisciplinary data sources – Web of Science, SCOPUS and Google Scholar – are discussed.
Focus points of the second part are: a) to show that the selection of the data sources will determine the outcome of your bibliometric analysis; b) how to check and enrich your data in order to extend the data pool for bibliometric analysis; and c) to consider that data sources are continuously changing their structure (number of indexed sources).

Some basic database features are also introduced exemplarily from different products. A distinction is made between subject-specific and multidisciplinary databases. In addition, subject-specific databases (e.g. “MathSciNet”,“SciFinder”, ADS), patent databases (e.g. “Derwent Innovations Index”, Espacenet (PATSTAT)) or pilot projects for citation indexing on the web (e.g. “BASE”, “CiteseerX”– all based on open access archives) are presented and examined critically regarding their data enrichment potential in bibliometric analyses.
Some final recommendations on data validation, on the importance of unique identifiers and on the use of „subjective“ data sources like CRIS will close this talk.

Scientometric Indicators in Use: an Overview
Sybille Hinze, German Centre for Higher Education Research and Science Studies (DZHW), Germany
Wolfgang Glänzel, Centre for R&D Monitoring (ECOOM) & Dept. MSI, KU Leuven, Belgium

The use of scientometric indicators dates back to the 1960s and 1970s in the United States where the first Science Indicators report was published in 1973. Since then a variety of indicators emerged aiming at reflecting various aspects of science and technology and their development. The presentation will give an overview of relevant indicators and their use in science policy and related realms. The specific focus will be on indicators used in the context of research evaluation. In particular indicators applied to measuring research performance at the various levels of aggregation i.e. the macro, meso and micro level will be introduced. A range of aspects reflecting research performance will be addressed such as research productivity and its dynamic development, the impact of research, collaboration, and thematic specialization. Options and limitations of the indicators introduced will be discussed.

Subject Classification in Bibliometrics – Theory, Approaches & Limitations
Stephan Gauch, German Centre for Higher Education Research and Science Studies (DZHW) & Humboldt Universität zu Berlin, Germany

Classifications shape the ways we perceive both the objects classified as well as differences between objects. Naturally, they shape bibliometric analyses, especially so when replication and consistency are key necessities. They also are, to no small extent, a product of discourse and therefore a special form of convention that can both be enabling as well as limiting. In the course of this session we will approach classifications from a theoretical as well as practical perspective. Among the questions addressed are “What does it mean to classify?”, “How can we determine what makes a *good* classification?”, “What to do if an object can be classified to multiple classes?” etc.
The session aims at providing a deeper and more informed insight to participants about what it really means to use classifications, encouraging both a critical mindset as well as providing practical advice.

Bibliometric Methods in Subject Delineation
Wolfgang Glänzel, Centre for R&D Monitoring (ECOOM) & Dept. MSI, KU Leuven, Belgium

Subject delimitation has become a central issue in so-called "domain studies". Science policy addresses new emerging or complex interdisciplinary topics the delineation of which is particularly difficult. The delineation of these topics or domains is, on one hand, strongly related with information retrieval since often rather traditional "search strategies" using core journals, keywords and phrases can be applied but, on the other hand, goals and methods of advanced subject delineation essentially differ from those of usual retrieval.
Proper subject delineation is also necessary to find correct reference standards for benchmarking the research performance of the actors in the topic under study.
The first part of the lecture will focus traditional techniques that can easily be developed for and used in the online versions of bibliographic databases.
The second part will introduce "bibliometrics-aided" retrieval. One of the main methodological characteristics of bibliometrics-aided retrieval is that bibliometrics allows including 'metric' components in search strategies. In the course of the lecture it will be shown how lexical and citation-based components can be used to gradually extend the original core (or seed) of surely relevant documents previously obtained from traditional literature searches.
The Web of Science offers the option of related records (based on bibliographic coupling) while Scopus uses keywords. Results can be filtered by their relevance and additional related documents can be added to the core set using thresholds. The application of direct citation links or more advanced textual similarities is again reserved for a rather small group of users with access to custom data. In this case, too, thresholds can be set to filter noise and to control precision and granularity.

The Evolution of Citation Databases with Focus on New Developments
Jeff Clovis, Clarivate Analytics

In 1955, Eugene Garfield published a paper in *Science* entitled "Citation Indexes for Science: A New Dimension in Documentation through Association of Ideas." Today, Dr. Garfield stands as a pioneer in the field of bibliometrics, and his legacy of a multidisciplinary, citation database has grown over the years to encompass new technologies not envisioned 58 years ago. These new technologies have moved citation data from print to electronic format, and ultimately into a Web-based environment of hypernavigation, optimistic and context-sensitive linking, and beyond. This paper will review the way in which the citation indexes have evolved to become part of the Web of Science platform - an integrated platform of networked resources utilized by 9,400 research libraries, government agencies and corporations worldwide. Starting with the importance of Dr. Garfield's efforts in bibliometrics that ultimately led to the development of the **ISI** platform, this paper will then focus on three critical areas: how the platform meets the growing need for access to multidisciplinary content in today's research environment; the development of our foundation, subject specialty and regional indexes that allow cross-content searching; and new technologies - the authentication, access, and routing management systems integrated into Web of Science.

Tuesday, July 24th

Designing Effective Queries for Document Retrieval

Stephan Gauch, German Centre for Higher Education Research and Science Studies (DZHW) & Humboldt Universität zu Berlin, Germany

The quality of bibliometric approaches, both explorative as well as evaluative, is strongly influenced by the way search queries to bibliometric databases are constructed. This becomes apparent when beginning scholars and practitioners of bibliometrics are shocked when they learn that the scientific field or topic they thought could be covered by a simple search term is far better covered by pages and pages of carefully selected and intricate combinations of search terms, journal sets and classifications. In this session we will explore good practice examples to design "effective queries". Participants will be shown how to get the most from expert knowledge, how to iteratively optimize queries, how to carefully use truncating techniques of terms to cover more ground and how to avoid pitfalls such as over-optimization or queries that are "too fuzzy around the edges".

Data Cleaning and Processing

Christine Rimmert, Institute for Interdisciplinary Studies of Science - AG Bibliometrie, Bielefeld University, Germany

The quality of bibliometric analyses is heavily depending on appropriated handling of the relevant raw data fields. Depending on the level of aggregation and the target objects under study, various issues of accuracy can come up with citation links and several data elements (document type, author, institution, country, journal, field and discipline). We will have a close look at the relevant data fields in modern citation databases like Web of Science or Scopus to see if they are "ready to use" for doing all kinds of bibliometric studies. Main problems of data quality will be shown and major types of errors and their consequences will be discussed. Standardisation, verification and the introduction of identifiers can help to overcome problems of data quality. Data processing approaches of the German competence centre for bibliometrics will be demonstrated.

Journal Impact Measures (Part 1 and Part 2)

Wolfgang Glänzel, Centre for R&D Monitoring (ECOOM) & Dept. MSI, KU Leuven, Belgium
Juan Gorraiz, Bibliometrics and Publication Strategies, University of Vienna, Austria

The seminar on impact measures will first shed light on the best known and most controversial indicator, namely Garfield's Journal Impact Factor. Its strengths and weaknesses as well as its correct use will be discussed thoroughly. Moreover the corresponding analytical tool, Thomson Reuter's Journal Citation Reports will be demonstrated.
Alternative impact measures like Eigenfactor metrics, SJR and SNIP have been introduced within the last years and will be presented in the second part of this talk to complete the picture.

Subject Normalization for Citation Analysis
Wolfgang Glänzel, Centre for R&D Monitoring (ECOOM) & Dept. MSI, KU Leuven, Belgium

Subject normalisation for citation analysis is a fundamental requirement for citation analysis in a multidisciplinary environment. Recently two fundamental approaches exist, the so-called source- and citingside normalisation, or, using another terminology, the a priori and a posteriori normalisation. Both methods will be introduced and described. Although the a priori normalisation represents a more advanced methodology, its application is reserved for a rather small group of users. The reason is the access to and the processing of the complete database (Web of Science or SCOPUS) since in this approach citations have to be normalised before they are counted. Knowledge about this normalisation technique is, however, important because this future-oriented methodology is already applied by larger bibliometric centres. The second method is rather conservative, but can be applied by any user who has access to the online version of the Web of Science or SCOPUS. The main characteristic of a posteriori normalisation is that citation counts are normalised after counting on the basis of proper reference values. Advantages and disadvantages of both methods are discussed and examples for the second approach are calculated.

Product Presentation: InCites
Jeff Clovis, Clarivate Analytics

InCites is a citation-based evaluation tool for academic and government administrators to analyze institutional productivity and benchmark output against peers and aspirational peers in a national or international context. With customized citation data, global metrics, and multidimensional profiles on the leading research institutions, over 9,000 sites globally, you'll get comprehensive insight into your performance.
Built on the foundation of *Web of Science*, *InCites* uses the most thorough, accurate, and objective data available.
In this short tutorial we will focus on a quick tour highlighting European institutions. All attendees will receive complimentary access for the ESSS sessions.

Wednesday, July 25th

Best Practices in Bibliometrics

Measuring Science: Evaluation and Mapping of Scientific Research
Ton van Raan, Centre for Science and Technology Studies (CWTS), Leiden University, The Netherlands

We present an overview of the latest developments in 'measuring science' based on bibliometric methods. Our central topic is the role of citation- and concept-networks and their combination as a natural basis for both the construction of performance indicators as well as the construction of science maps. We present real-life examples of practical applications of advanced bibliometric methods in the evaluation and mapping of universities, departments and institutes. These applications also offer individual scientists instruments to explore their own research field. We explain how cluster-based normalization is used to tackle the problem of the large differences in citation density within fields. The strategic potential of science mapping based on new bibliometric instruments such as the VoS-viewer and CitNetExplorer is shown by recent work on Sleeping Beauties. Finally we discuss the new version of the Leiden Ranking in comparison with other prominent university rankings.

Bibliometric Services at the University of Vienna
Juan Gorraiz, Bibliometrics and Publication Strategies, University of Vienna, Austria

Bibliometrics is ideal for librarians to develop and provide innovative services for both academic and administrative university staff. The Bibliometrics and Publication Strategies Department in Vienna has been implemented within the Library and Archive Services of the University of Vienna. It can serve as a role model for other academic librarians who wish to become more engaged in this field or even plan to implement according services. This presentation gives an overview of all bibliometric services offered by the department and will then focus on those related to individual evaluation and particularly to professorial appointments. The Vienna University bibliometric approach relies on a variety of basic, simple indicators and further control parameters in order to address the multi-dimensionality of the problem and to foster comprehensibility. Our "top counts approach" allows an appointment committee to pick and choose from a portfolio of indicators according to the actual strategic alignment. Furthermore, control and additional data help to understand disciplinary publication habits, to unveil concealed aspects and to identify individual publication strategies of the candidates or individual researchers to be evaluated. Bibliometrics only shines a light on quantitative aspects and should never be applied irrespective of the given qualitative context.

Policy Use of Bibliometric Evaluation and its Repercussions on the Scientific Community with Focus on Research, Technology, Patents, Development and Knowledge Transfer
Koenraad Debackere, KU Leuven, Belgium

Modern science policy firmly relies on bibliometric data & indicators to assess the scientific performance of research institutions, research groups and even individual researchers. In addition, benchmarking the scientific performance of countries and regions is another item on the agenda of evaluative science policy. During the presentation, the repercussions of this policy use of bibliometric evaluation will be dealt with along three lines of thought and reflection. First, recent trends and insights into data and indicator use for evaluative science policy will be highlighted.
Second, an overview of current policy frameworks will be presented, taking into account the recent trend to link scientific performance to so-called smart specialization policies.
Third, we will reflect upon the multifaceted impact those trends have (or may have) on the scientific community and (in the limit) the behavior of individual scientists.

Research Impact Assessment Across Domains -
Combining Standards and Bibliometrics Data
Stephan Gauch, German Centre for Higher Education Research and Science Studies (DZHW) & Humboldt Universität zu Berlin, Germany

There exists a long-standing tradition of linking bibliometric data to other types of sources, e.g. patent documents to "link science to innovation". With the advent of alternative metrics there has been a surge of such expansive activities. In some cases, unique identifiers and APIs are in place to make the life of a researcher (relatively) easy. Everything is neat and clean. At least on the surface – but that's a different issue. In other cases, all there is is ugly, dirty and messy data – and sometimes not even that. It is these cases, a researcher needs to use a wider array of tools. But wait… there's more. The task to unlock such new data sources is not limited to the realm of the technical. If indicators are built on top of this linked data, there remains the challenge to construct/uncover meaning and relevance of such numbers. A task as easily overlooked and neglected, as it is fundamental. In this session, you will get a walkthrough of such a challenge using the example of technical standards as new data source. There are a number of questions to the link between standards and publications: How much science is there in technical standards? Are there feedback effects to being cited in standards? Maybe you get more citations from this! What is the meaning of this type of citation counts? Just to name a few. You will be presented with an array of tools to make your life easier, how to plan research designs beyond bibliometrics to uncover the meaning of such counts, why it is important to understand the domain-specific citation cultures and practices, typical pitfalls in opening up new data sources, and, en passsant, learn something about the inner workings of technical standards and the standardisation system.

Bibliometrics in Practice: How to GenerateReports for Institutions
Daniel Torres-Salinas, Universidad de Granada (EC3metrics, Research Evaluation Unit), Spain

In an institutional context and at a professional level, one of our main tasks is to carry out bibliometric reports. These studies are essential because they are used by managers to make decisions (distribution of funds, recruitment of personnel, planning of research lines, etc.). In this talk we will explain how to make a global bibliometric report of an institution, we use as a case study the University of Granada. We focus on these topics:

1) General considerations: target, selection of indicators, objectives, etc.); 2) what sources of information can be used; 3) How to contextualize and interpret the indicators; 4) How to compare the results with other institutions (Benchmarking); 5) How to make graphs and tables; and 6) Dissemination of results and data.

The Application Context of Research Assessment Methodologies
Henk F. Moed, Independent researcher and scientific advisor

The lecture presents a series of key notions from the speaker's new monograph "Applied Evaluative Informetrics (Springer, 2017)". First, an analytical distinction is made between *four* domains of intellectual activity in a research assessment process: the domains of policy, evaluation, analytics, and data collection. Next, the lecture defends the idea of a multi-paradigmatic, value-free informetrics, and argues that, although evaluative assumptions ("values") on what constitutes research performance play a crucial role in research assessment, this role often remains implicit, and such values are extra-informetric, in the sense that their validity cannot be grounded in informetric research. A series of examples illustrates how the choice of indicators in an assessment process is influenced by policy objectives, and how technical indicator concepts fit into the developers' wider – social, cultural and historical – context. It is further argued that evaluative frameworks are indispensable but often missing in research assessment. Finally, the lecture critically reflects on the assumptions underlying current practices in the use of informetric indicators in research assessment, and proposes a series of alternative approaches, indicating their pros and cons.

Topic Prominence in Science – a New Bibliometric Approach to Identify High-Dynamic Research Topics
Tomasz Asmussen, Customer Consultant, Elsevier

As research is becoming increasingly interdisciplinary and international it becomes more difficult to identify existing research strength and uncover new emerging research fields with a high relevancy globally. Elsevier and SciTech Strategies have partnered to develop a scientifically founded and yet practical bibliometric approach to identify research Topics using direct citation analysis and further assigning a Prominence indicator to determine its momentum. By applying this bibliometric approach to the full Scopus data set since 1996 roughly 97,000 stable research topics have been identified and assigned a Prominence indicator by weighing 3 metrics (citation count, views count, journal impact) for papers clustered in a Topic to determine its momentum. The fact that a Topic's Prominence highly correlates with funding makes it highly relevant for research managers and researchers alike and thus Prominence provides a data-driven indication into which research topics are the best to invest time and efforts in. Topic Prominence in Science is available in SciVal and can be applied to countries, universities, researchers or groups of researchers for more than 8,500 research institutions globally to run a full research portfolio analysis, in seconds.

Dimensions - Linking Publications and Citations with Grants, Patents and Clinical Trials to Widen the View
Tom Lickiss – Senior Research Consultant, ÜberResearch

Publications and their associated citations are a good proxy to measure the impact from and within the scientific community, but this is only one facet of a much larger picture.

Dimensions has been realised to address this issue, and to provide greater and more openly available insights across the research lifecycle.
By integrating more content types (like grants to capture project based funding, clinical trials for translation into clinical cures, patents to provide the commercial translation of research activities and even policy documents to reflect where research results made it into policies) we can change the ways in which we access and understand the scholarly landscape.
Dimensions does not just put more documents in a database, it also links them consistently together to allow a 'trajectory view' at the institutional, researcher or topic level, enabling users to gather a broader and more qualitative understanding of the associated research activity. Taking this broader approach to research information also provides the opportunity to develop new scientometric approaches, using a more multifaceted view to analyse input, results and impact from various angles.
In the presentation we will explain the basic concepts and use cases of Dimensions, and discuss how researchers who are interested to work with or build on our data can do so.

Thursday, July 26th

The Application of Network Analysis in Science Studies: Common Theoretical Background for Broad Applications

Bart Thijs, Centre for R&D Monitoring (ECOOM), KU Leuven, Belgium

Network analysis in scientometrics provides a powerful set of tools and techniques to uncover the relations, structure and development among different actors in science. It is often referred to as Mapping of Science and can be applied to all entities associated with science like disciplines, journals, institutions and researchers. This lecture will focus mainly on different measures of relations between entities tackling both on the classical approaches as on the new techniques of network analysis in an application-oriented approach within a solid theoretical framework. Relations based on citations and references include bibliographic coupling, co- and cross-citation. Other direct links between entities include co-authorship, institutional collaboration or international collaboration. Also lexical approaches like co-word analysis and text mining will be tackled. Each of these measures has their own properties which can have strong implications on the applicability of the analytical techniques. In order to improve the distinctive capabilities of these measures new hybrid approaches have been proposed. The lecture will also deal with several analytical tools and visualization techniques that are suitable for capturing the underlying structure. Clustering techniques like k-means or Ward's hierarchical clustering are proven techniques to classify the entities modularity clustering has become a popular alternative.

Research Collaboration Measured by Co-Authorship

Wolfgang Glänzel, Centre for R&D Monitoring (ECOOM) & Dept. MSI, KU Leuven, Belgium

Co-authorship can be used as a proxy for research collaboration at higher levels of aggregation, e.g., in the case of institutional or international collaboration. But even at the level of research teams and individual scientists, co-authorship patterns reveal important information about main actors and their role in the network of scholarly communication. In the first part of the lecture the analysis of co-authorship networks at the micro, meso and macro level is described. The strength of co-authorship links among individual scientists, institutions or countries can preferably be determined using appropriate similarity measures. Co-authorship networks can readily be visualised applying suitable software that is available and free for non-commercial use. In the second part, bibliometric indicators for the analysis of research collaboration at the meso and macro level will be introduced. It will be shown how indicators and similarity measures can be calculated using the "analyse results" and "citation report" tool in the online version of the Web of Science.

Technology Maturity – Using Bibliometric Methods to Assess Technology Readiness

Maria de Kleijn-Lloyd*, SVP Analytical Services, Elsevier

Governments and research funders are increasingly trying to ensure research they sponsor leads to economic impact and technology break-throughs. Instead of thinking in

terms of research disciplines, they reframe the question to ‘grand challenges’ or to technologies like nanotechnologies, artificial intelligence or robotics. And on top of the usual ‘where is the excellence and who collaborates with who’, questions are asked on the maturity or technology readiness. We will present a method and case study using bibliometrics to investigate research in technologies and assess technology readiness.

Friday, July 27th

Focus Topic Day: Bibliometrics & Open Access

The Different Flavours of Open Access
Bernhard Schubert, Open Access Office, University of Vienna, Austria

This presentation introduces the concept of Open Access to scholarly publications and the various "roads" leading towards it. We will also be looking at transformational business models from Closed to Open Access and at services institutions can offer to support this development.

Open Access and Publication Practices in Astronomy and Mathematics
Niels Taubert, Bielefeld University, Germany

In astronomy and mathematics a large share of publications is freely accessible online via disciplinary or subject-specific repositories. Referring to an empirical study of including bibliometric analysis and in-depth interviews, the contribution examines the role of self-archived manuscripts in the communication system of the two disciplines. The analysis shows that repositories act as a second channel of disseminating research in addition to journals. Moreover, it reconstructs how repositories are being used by authors and readers. In both fields authors even-handedly self-archive their manuscripts in part not only before the publication appears in a journal but even before peer review is completed. This happens for different reasons, including the improvement of accessibility, the protection of priority, and to increase the chances of getting the research published in a journal. Early self-archiving before completion of peer review de facto bypasses the evaluation procedure which is a precondition for trust in published research. Therefore, it is asked whether readers deal with such pre-prints in a specific way, taking their potential non-peer-reviewed nature into account. The reconstruction shows that the usability of self-archived manuscripts results from specific routines among the readers: They interpret contextual information of pre-prints, undertake tests of plausibility, use the author name as a proxy for trust, limit the citation of pre-prints, and distinguish between trustworthy and non-trustworthy components of a pre-print. Thus, the routines of the readers are complementary to the routines of authors and are – to some extent – shaped by epistemic characteristics of the particular field.

Bibliometrics and Open Access
Eric Archambault, 1science & Science-Metrix, Canada

Academics have been examining the Open Access (OA) model for scientific publications for years. Though it has been noted repeatedly that OA availability is rising steadily, current measurement is often limited by vague definitions and existing bibliographic databases. One of the challenges is to distinguish more clearly between different types of availability (e.g. gold or green), while accounting for, but not conflating, other important dimensions such as time to availability, transiency and license type. Another major challenge lies in measurement per se. Measuring open access availability can involve

computing the total number of available articles and the percentage of available papers. This presentation will examine current means of retrieving open access articles (the numerator in the percentage) and the databases currently being used to count the total number of available papers (the percentage's denominator). Advocates of OA have been arguing that by increasing accessibility, OA would enhance the impact of research. This presentation will review current evidence on the OA citation advantage including the arguments raised by its detractors.

Disentangling Gold Open Access: Disciplinary and Country Effect

Nicolas Robinson-Garcia, INGENIO (CSIC-UPV), Universitat Politècnica de València, Spain; Universidad de Granada (EC3metrics), Spain / Daniel Torres-Salinas, Universidad de Granada (EC3metrics, Research Evaluation Unit), Spain

In this seminar we will discuss current publication trends in gold Open Access (OA). The purpose is to develop a full understanding on country patterns, OA journals characteristics and citation differences between gold OA and non-gold OA publications. For this, we will first review current literature regarding Open Access and its relation with its so-called citation advantage. Starting with a chronological perspective we will describe its development, how different countries are promoting OA publishing, and its effects on the journal publishing industry. We will deepen the analysis by investigating the research output produced by different units. First, we will focus on the production of countries with a special emphasis on citation and disciplinary differences. Gold OA publishing is being encouraged in many countries as opposed to Green OA. We will discuss how this affects researchers' publication patterns and whether it ensures an alleged citation advantage as opposed to non-gold OA publications.

Saturday, July 28th

Altmetrics: State of the Art and Future Work
Isabella Peters, Leibniz-Informationszentrum Wirtschaft (ZBW), Germany

The lecture will present the current state of the art of altmetrics research and its major findings. It will particularly focus on studies on the coverage and intensity of altmetrics as well as on the theories and models trying to establish a theoretical background of altmetrics. Research gaps will be identified and current developments and initiatives that aim at bringing altmetrics into practice (e.g., NISO, EU, LIBER) will be presented.

Practical Applications of Altmetrics
Nicolas Robinson-Garcia, INGENIO (CSIC-UPV), Universitat Politècnica de València, Spain; Universidad de Granada (EC3metrics), Spain

This talk addresses practical issues, limitations and problems we might encounter when retrieving and processing altmetric data. We will explore what it is what the indicators provided by the main altmetric providers offer and how these can be used in a meaningful way to make informative and sensible analyses which offer could offer an added value to our institutions. The first part of the talk will focus on the discussion of the peculiarities and technicalities related to how altmetric data is provided to the user. The second part will provide examples and show empirical approaches that can be applied to inform on the social media attention of researchers' activity.