programme

european summer school for scientometrics

JULY 12 – 17
2015
LEUVEN

 european
summer school
for scientometrics
european
summer school
for scientometrics
european
summer school
for scientometrics
The esss 2015 comprises tutorials, lectures, seminars, focus topics, individual hands-on sessions and teamwork in small groups.

Sunday, July 12th:
- **Tutorial Day**
  - 11.00-12.30 *Bibliometric Crash Course*
    - Wolfgang Glänzel, Centre for R&D Monitoring (ECOOM), KU Leuven, Belgium / Juan Gorraiz, Bibliometrics and Publication Strategies, University of Vienna, Austria / Christian Gumpenberger, Bibliometrics and Publication Strategies, University of Vienna, Austria / Stefan Hornbostel, Institute for Research Information and Quality Assurance (iFQ), Germany / Sybille Hinze, Institute for Research Information and Quality Assurance (iFQ), Germany
  - 12.30-13.30 Lunch break
  - 13.30-14.30 *Thomson Reuters; From Reliable Data to Trusted Research Performance Analysis*
    - Tihomir Tsenkulovski, Customer Education and Pre-Sales Specialist, Thomson Reuters
  - 14.30-15.00 Coffee break
  - 15.00-16.00 *Scopus Walk-Through Presentation*
    - Floortje Flippo, Solutions Sales Manager, Research Management, Elsevier

Monday, July 13th:
- **Lectures Day – Bibliometric Concepts, Indicators and Data Sources**
  - 09.00-09.05 Welcome and Opening Remarks
  - 09.05-09.45 *Bibliometrics Reviewed: History, Institutionalization and Concepts*
    - Stefan Hornbostel, Institute for Research Information and Quality Assurance (iFQ), Germany
### Programme Lectures and Seminars

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Speaker(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>09.45-10.30</td>
<td><strong>Introduction to Bibliometric Data Sources</strong></td>
<td>Wolfgang Glänzel, Centre for R&amp;D Monitoring (ECOOM), KU Leuven, Belgium / Juan Gorraiz, Bibliometrics and Publication Strategies, University of Vienna, Austria</td>
</tr>
<tr>
<td>10.30-11.00</td>
<td>Coffee break</td>
<td></td>
</tr>
<tr>
<td>11.00-12.00</td>
<td><strong>Scientometric Indicators in Use: an Overview</strong></td>
<td>Sybille Hinze, Institute for Research Information and Quality Assurance (iFQ), Germany / Wolfgang Glänzel, Centre for R&amp;D Monitoring (ECOOM), KU Leuven, Belgium</td>
</tr>
<tr>
<td>12.00-12.45</td>
<td><strong>Classifications in Bibliometrics: Theory, Approaches &amp; Limits</strong></td>
<td>Stephan Gauch, Institute for Research Information and Quality Assurance (iFQ), Germany</td>
</tr>
<tr>
<td>12.45-13.45</td>
<td>Lunch break</td>
<td></td>
</tr>
<tr>
<td>13.45-14.45</td>
<td><strong>Bibliometrics in Action: Assessing the Research Outcomes of Universities and Funding Agencies</strong></td>
<td>Linda Butler, College of Arts and Social Sciences, The Australian National University, Australia</td>
</tr>
<tr>
<td>14.45-15.30</td>
<td><strong>Evaluation and Mapping of Research Programs and Scientific Developments, Novel Properties of the Leiden Ranking and Comparison with other Rankings</strong></td>
<td>Anthony van Raan, CWTS – Centre for Science and Technology Studies, Leiden University, The Netherlands</td>
</tr>
<tr>
<td>15.30-16.00</td>
<td>Coffee break</td>
<td></td>
</tr>
<tr>
<td>16.00-16.45</td>
<td><strong>Policy Use of Bibliometric Evaluation and its Repercussions on the Scientific Community</strong></td>
<td>Koenraad Debackere, KU Leuven, Belgium</td>
</tr>
<tr>
<td>16.45-17.15</td>
<td><strong>Assessing Research Performance Using Thomson Reuters Analytics Solutions</strong></td>
<td>Evangelia Lipitakis, Research Analytics Consultant, Thomson Reuters</td>
</tr>
</tbody>
</table>

**Tuesday, July 14th:**

**Seminars Day 1 – Data Handling**

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Speaker(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>09.00-09.45</td>
<td><strong>Data Cleaning and Processing</strong></td>
<td>Matthias Winterhager, Institute for Interdisciplinary Studies of Science / AG Bibliometrie, Bielefeld University, Germany</td>
</tr>
<tr>
<td>09.45-10.30</td>
<td><strong>Author Identification</strong></td>
<td>Wolfgang Glänzel, Centre for R&amp;D Monitoring (ECOOM), KU Leuven, Belgium</td>
</tr>
<tr>
<td>10.30-11.00</td>
<td>Coffee break</td>
<td></td>
</tr>
<tr>
<td>11.00-11.45</td>
<td><strong>Subject Normalization for Citation Analysis</strong></td>
<td>Wolfgang Glänzel, Centre for R&amp;D Monitoring (ECOOM), KU Leuven, Belgium</td>
</tr>
<tr>
<td>11.45-12.30</td>
<td><strong>Journal Impact Measures</strong></td>
<td>Wolfgang Glänzel, Centre for R&amp;D Monitoring (ECOOM), KU Leuven, Belgium / Juan Gorraiz, Bibliometrics and Publication Strategies, University of Vienna, Austria</td>
</tr>
<tr>
<td>12.30-13.30</td>
<td>Lunch break</td>
<td></td>
</tr>
<tr>
<td>13.30-14.45</td>
<td><strong>Bibliometrics in Action: Assessing the Research Outcomes of Universities and Funding Agencies</strong></td>
<td>Linda Butler, College of Arts and Social Sciences, The Australian National University, Australia</td>
</tr>
<tr>
<td>14.45-15.30</td>
<td><strong>Evaluation and Mapping of Research Programs and Scientific Developments, Novel Properties of the Leiden Ranking and Comparison with other Rankings</strong></td>
<td>Anthony van Raan, CWTS – Centre for Science and Technology Studies, Leiden University, The Netherlands</td>
</tr>
<tr>
<td>15.30-16.00</td>
<td>Coffee break</td>
<td></td>
</tr>
<tr>
<td>16.00-16.45</td>
<td><strong>Policy Use of Bibliometric Evaluation and its Repercussions on the Scientific Community</strong></td>
<td>Koenraad Debackere, KU Leuven, Belgium</td>
</tr>
<tr>
<td>16.45-17.15</td>
<td><strong>Assessing Research Performance Using Thomson Reuters Analytics Solutions</strong></td>
<td>Evangelia Lipitakis, Research Analytics Consultant, Thomson Reuters</td>
</tr>
</tbody>
</table>
**Wednesday, July 15th: Seminars Day 2 – Collaboration and Networks**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
</table>
| 09.00-09.45 | The Application of Network Analysis in Science Studies: Common Theoretical Background for Broad Applications  
Wolfgang Glänzel, Centre for R&D Monitoring (ECOOM), KU Leuven, Belgium |
| 09.45-10.30 | Research Collaboration Measured by Co-Authorship  
Wolfgang Glänzel, Centre for R&D Monitoring (ECOOM), KU Leuven, Belgium |
| 10.30-11.00 | Coffee break                                                                               |
| 11.00-11.45 | Introduction to Gephi  
Wolfgang Glänzel, Centre for R&D Monitoring (ECOOM), KU Leuven, Belgium / Bart Thijs, Centre for R&D Monitoring (ECOOM), Dept. MSI, Katholieke Universiteit Leuven, Belgium |
| 11.45-12.30 | Introduction to Bibexcel  
Juan Gorraiz, Bibliometrics and Publication Strategies, University of Vienna, Austria / Nicola De Bellis, Medical Library, University of Modena and Reggio Emilia, Italy |
| 12.30-13.30 | Lunch break                                                                                 |
| 13.30-15.00 | Afternoon Sessions: Structures in Science and Options for their Visualization               |

**Thursday, July 16th: Focus Topic Day 1 – Individual Evaluation**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
</table>
| 09.00-09.45 | General Introduction to Individual-Level Bibliometrics Evaluation  
Rodrigo Costas, CWTS – Centre for Science and Technology Studies, Leiden University, The Netherlands / Paul Wouters, CWTS – Centre for Science and Technology Studies, Leiden University, The Netherlands |
| 09.45-10.30 | Peer Review Research  
Hans Dieter Daniel, Professorship for Social Psychology and Research on Higher Education, ETH Zurich & Evaluation Office, University of Zurich |
| 10.30-11.00 | Coffee break                                                                                 |
### Friday, July 17th: Focus Topic Day 2 – Individual Evaluation

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.00-11.45</td>
<td>Prognostic Validity from a Bibliometric Perspective</td>
<td>Martin Reinhart, Institute for Research Information and Quality Assurance (iFQ), Humboldt University, Germany</td>
</tr>
<tr>
<td>11.45-12.30</td>
<td>Bibliometrics from the Perspective of a University</td>
<td>Juan Gorraiz, Bibliometrics and Publication Strategies, University of Vienna, Austria / Christian Gumpenberger, Bibliometrics and Publication Strategies, University of Vienna, Austria</td>
</tr>
<tr>
<td>12.30-13.30</td>
<td>Lunch break</td>
<td></td>
</tr>
<tr>
<td>13.30-14.15</td>
<td>Supporting Expert Selection with Automated Natural Language Process Approaches</td>
<td>Giles Radford, ÜberResearch GmbH, Germany</td>
</tr>
<tr>
<td>14.15-15.00</td>
<td>Bibliometrics from the Perspective of Research Funders and Ethical Aspects</td>
<td>Ulrike Felt, Head of Department and Professor of Science and Technology Studies, University of Vienna, Austria</td>
</tr>
<tr>
<td>15.00-15.30</td>
<td>Coffee break</td>
<td></td>
</tr>
</tbody>
</table>
| 15.30-17.30 | Bibliometric Agora                                                   | Panelists: Ulrike Felt, Head of Department and Professor of Science and Technology Studies, University of Vienna, Austria / Hans Dieter Daniel, University of Zurich, Switzerland  
Moderation: Stefan Hornbostel, Institute for Research Information and Quality Assurance (iFQ), Germany |
| 18.30-19.30 | Social Event: Béguinage Guided Tour                                  | Meeting point: Entrance courtyard Faculty of Business & Economics, Naamsestraat 69             |
| 19.45     | Conference Dinner                                                   | Restaurant Faculty Club, Groot Begijnhof 14                                                  |
| 09.00-09.45 | Issues with Individual Evaluations in SSH                           | Gunnar Sivertsen, Nordic Institute for Studies in Innovation, Research and Education (NIFU), Oslo, Norway |
| 09.45-10.30 | Google Scholar as a Data Source for Bibliometric Analysis           | Nicolas Robinson-Garcia, EC3Metrics spin-off, Universidad de Granada, Spain                   |
| 10.30-11.00 | Coffee break                                                        |                                                                                               |
| 11.00-12.00 | Bibliometrics and Open Access                                        | Eric Archambault, Science-Metrix, Canada                                                      |
| 12.00-13.00 | Lunch break                                                          |                                                                                               |
| 13.00-15.00 | Exercises / 2 Groups                                                 |                                                                                               |
| 15.00-16.00 | Q&A, Farewell / 2 Groups                                             |                                                                                               |
Abstracts

Sunday, July 12th:
Tutorial Day

Bibliometric Crash Course
Wolfgang Glänzel, Centre for R&D Monitoring (ECOOM), KU Leuven, Belgium / Juan Gorraiz, Bibliometrics and Publication Strategies, University of Vienna, Austria / Christian Gumpenberger, Bibliometrics and Publication Strategies, University of Vienna, Austria / Stefan Hornbostel, Institute for Research Information and Quality Assurance (iFQ), Germany / Sybille Hinze, Institute for Research Information and Quality Assurance (iFQ), Germany

Introduction to basic bibliometric terminology, concepts and data sources for participants who are short on experience in the field.

Thomson Reuters: From Reliable Data to Trusted Research Performance Analysis
Tihomir Tsenkulovski, Customer Education and Pre-Sales Specialist, Thomson Reuters

In this workshop, fundamental characteristics that make Web of Science Core Collection citation data reliable for research performance assessment reporting, such as content selection, metadata indexing and enhancement, and data organization will be discussed. The creation of the citation network and various bibliometric indicators directly visible on Web of Science records for research performance evaluation will be presented followed by a live demonstration of InCites research analytical tool for benchmarking and advanced bibliometric analysis. InCites offers access to more than 5,000 institutions in 240 countries covering the time period 1980-2015. This session will focus on how InCites can be used to precisely elaborate a perimeter of analysis and produce key quantitative-based performance indicators and reports to develop strategic initiatives and enhance research performance and visibility.

Scopus Walk-Through Presentation
Floortje Flippo, Solutions Sales Manager, Research Management, Elsevier

In this lecture the latest enhancements of Scopus, world’s most comprehensive abstract and citation database, will be presented, including the expansion of the coverage of citation data and of book contents. Special focus will be on the extensive Author search, Affiliation search, H-index and personalisation features. Also the relationship with Mendeley, Elsevier’s free reference management and collaboration tool will be discussed and the availability of Altmetrics in Scopus and Mendeley shown. This lecture will also offer the opportunity to elaborate on the specifics of using Scopus as a source of bibliometric data and on any specific questions the participants may have.

Monday, July 13th:
Lectures Day – Bibliometric Concepts, Indicators and Data Sources

Bibliometrics reviewed: History, institutionalization, and concepts
Stefan Hornbostel, Institute for Research Information and Quality Assurance (iFQ), 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
Wolfgang Glänzel, Centre for R&D Monitoring (ECOOM), 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 serve as data source for a bibliometric study, however, comparative studies and large-scale analyses require large standardized data sources such as provided by bibliographic databases. After a short general introduction providing background information, the main features of bibliographic databases are discussed with special focus on the question of which features are useful, essential or indispensable for bibliometric use. Most databases are designed for information retrieval and thus not necessarily fit for metric applications. In this context some basic features are introduced using examples from different databases. Distinction is made between specialized subject databases and multidisciplinary databases. In particular, the opportunities and limitations of the three major and multidisciplinary data sources – Web of Science, SCOPUS and Google Scholar – are discussed. Alternatively subject specific databases (e.g. “MathSciNet”, “SciFinder”), patent databases (e.g. “Derwent Innovations Index”, Espacenet (PATSTAT)) or pilot projects for citation in-
dexing on the web (e.g. “Citebase”, “CitesearchX” – all based on open access archives) are presented and examined critically regarding their beneficial potential for data enrichment in bibliometric analyses.

Classifications in Bibliometrics: Theory, Approaches & Limits
Stephan Gauch, Institute for Research Information and Quality Assurance (iFQ), 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 at 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.

Bibliometrics in Action: Assessing the Research Outcomes of Universities and Funding
Linda Butler, College of Arts and Social Sciences, The Australian National University, Australia

With the knowledge we have gained on the various bibliometric indicators and data sources, we will now move to concrete examples of how these indicators have been deployed in practice. For many years, institutions have commissioned bibliometric analyses to assess their strengths and weaknesses in the context of high level strategic planning, or to utilise in the review of internal units. More recently, they have sort to understand more deeply the impact of this data on the increasingly important international rankings, with a view to best devising strategies to improve their place on these lists. Research funding agencies (both government and not-for-profit) are keen to demonstrate the effectiveness of their funding decisions in choosing the “best” projects or individuals to fund, and see the potential of bibliometrics to help in this. Governments are now starting to incorporate bibliometric measures into their national assessment exercises. This lecture will provide examples from these analyses, and will discuss some of the feedback received from those commissioning the studies and those whose work was the subject of the assessment. It will provide details of Australia’s Excellence in Research for Australia initiative, contrasting its use of bibliometric indicators to that of England’s Research Excellence Framework.

Evaluation and Mapping of Research Programs and Scientific Developments, Novel Properties of the Leiden Ranking and Comparison with other Rankings
Anthony van Raan, CWTS – Centre for Science and Technology Studies, 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 practical applications of advanced bibliometric methods with recent examples and discuss the recent Leiden Manifesto with its guiding principles for the proper use of bibliometric indicators. A major problem for proper normalization of citation impact is caused by the large differences in citation-density within fields. We show how to solve this problem with our recently developed cluster-based normalization procedures. The strong strategic potential of science mapping based on new CWTS bibliometric instruments such as the VoS-viewer and CitNetExplorer is shown by recent work on the exploration of the interfaces between large scientific fields and the discovery of emerging topics. A special focus will be on the new features of the Leiden Ranking, in particular the remarkable influence of the new normalization procedure and the consequences of the removal of retracted publications. We will compare the properties of the Leiden Ranking with the other prominent university rankings.
Policy Use of Bibliometric Evaluation and its Repercussions on the Scientific Community
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.

Assessing Research Performance Using Thomson Reuters Analytics Solutions
Evangelia Lipitakis, Research Analytics Consultant, Thomson Reuters

In this workshop Thomson Reuters InCites research analysis and bibliometrics indicators will be presented. InCites is a highly customizable, web-based research evaluation tool that allows you to benchmark and analyze research performance using a class of advanced normalized bibliometrics indicators at various organizational levels i.e. paper/author/institution/country/journal/field, as well as your internal institutional departments and structure, using the Web of Science Profiles module. While InCites provides a class of quantitative research performance evaluation methodologies combined with enhanced reporting capabilities at the macro level, Web of Science Profiles allows bibliometric analysis and reporting at the micro level. Web of Science Profiles offers all InCites bibliometric methodologies and advanced analytic reporting capabilities at the faculty and department level. Web of Science Profiles bibliometrics analysis can offer substantial benefits for internal research policy and informed decision making at the institutional level.

Tuesday, July 14th: Seminars Day 1 – Data Handling

Data Cleaning and Processing
Matthias Winterhager, 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.

Author Identification
Wolfgang Glänzel, Centre for R&D Monitoring (ECOOM), KU Leuven, Belgium

The seminar lecture focuses on the identification of authors and the disambiguation of their names. This issue has become an key prerequisite for individual-level bibliometrics. Also the identification of author self-citations requires correct assignment of names to authors. Although Thomson Reuters and Elsevier offer the use of Researcher-/Author-IDs, thorough author identification and name disambiguation is only partially feasible on the basis of these IDs. Typical problems in dealing with these IDs will be discussed.

In the course of the lecture it will be shown how standardisation of names and initials in combination with institutional assignment, IDs and external sources can be used to identify authors in the Web of Science and SCOPUS databases. Computerised techniques based, for instance, on N-grams can essentially facilitate the matching of external sources such as author publication lists or CVs with bibliographic databases. This approach is briefly described in this lecture. Because of possible type I and II errors and the sensitivity of the matter, final manual corrections of the results of such automated processes remain indispensable.
Subject Normalisation for Citation Analysis

Wolfgang Glänzel, Centre for R&D Monitoring (ECOOM), 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 citing-side 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.

Journal Impact Measures

Wolfgang Glänzel, Centre for R&D Monitoring (ECOOM), 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. 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 recent years and will be presented to complete the picture. The theoretically imparted knowledge will finally be consolidated in practical exercises.

Wednesday, July 15th: Seminars Day 2 – Collaboration and Networks

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

Bart Thijs, Centre for R&D Monitoring (ECOOM), Dept. MSI, 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 have 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 visual-
Thursday, July 16th: Focus Topic Day 1 – Individual Evaluation

General Introduction to Individual-Level Bibliometrics Evaluation
Rodrigo Costas, CWTS – Centre for Science and Technology Studies, Leiden University, The Netherlands / Paul Wouters, CWTS – Centre for Science and Technology Studies, Leiden University, The Netherlands

The bibliometric analysis of individual researchers is one of the most difficult and challenging types of bibliometric approaches. This is mainly due to the problems and difficulties in the data collection together with the statistical and conceptual problems related with the analysis of small sets of data. This presentation will introduce a general discussion on these conceptual problems and will frame the most important aspects that bibliometric practitioners must take into account when confronted with individual-level analysis. Recent frameworks presented in the ‘dos and don’ts in individual level bibliometrics’ as well as in the new ‘Leiden Manifesto’ will be considered for the overall discussion as well as for the proposal of guidelines on how indicators must and must not be used at this level of analysis.

Peer Review Research
Hans Dieter Daniel, Professorship for Social Psychology and Research on Higher Education, ETH Zurich & Evaluation Office, University of Zurich

Peer review is the most important mechanism for quality control in science. By assessing the quality of research, peer review determines which applicants receive funding and what research results are published. In this lecture I’ll summarize the state of art of research on journal, fellowship, and grant peer review. The emphasis is on empirical research dealing with the reliability, fairness, and predictive validity of the peer review process. The lecture will cover both closed and open peer review.

Prognostic Validity from a Bibliometric Perspective
Martin Reinhart, Institute for Research Information and Quality Assurance (iFQ), Humboldt University, Germany

The assessment of individual researchers through bibliometric indicators has often been problematized and the Leiden Manifesto recently called, again, for qualitative judgements in this domain. The presentation will discuss popular ways of (quantitatively) assessing individual researchers and will then ask, whether these tools are reasonable predictors for future success. The central question will be in what ways bibliometric tools gain prognostic validity by being self-fulfilling prophecies. If bibliometric indicators are used for publishing and funding decisions and are thus having an effect on the chances of success for individual researchers, how should we judge the validity of these tools independently?

Bibliometrics from the Perspective of a University
Juan Gorraiz, Bibliometrics and Publication Strategies, University of Vienna, Austria / Christian Gumpenberger, 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. Recruitment and professorial appointment procedures are crucial for the administration and management of universities and higher education institutions in order to guarantee a certain level of performance quality and reputation. 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. Our approach has already been applied to 14 professorial appointment procedures (PAP) in Life Sciences, Earth and Environmental Sciences and Social Sciences comprising 221 candidates overall. A retrospective assessment of all hitherto performed PAP also showed an overlap between the committees’ short-listed top candidates and the bibliometric top candidates to a certain degree. Bibliometrics only shines a light on quantitative aspects and should never be applied irrespective of the given qualitative context.

---

**Supporting Expert Selection with Automated Natural Language Process Approaches**

**Giles Radford, ÜberResearch GmbH, Germany**

Research Funders spend a great deal of time and money to try and ensure that grant applications go through a fair, transparent and appropriate process before a funding decision is made. But of all those steps the most difficult, the most labour intensive, and therefore the most costly is finding and obtaining reports from suitable peer reviewers.

By using applicable data – a global database of grant awards and publications – and technology that allows an accurate research comparison to the incoming application, we believe that research funders can find reviewers more quickly, find new reviewers that they haven’t approached before; find reviewers who are best able to make the review; improve report submission rates, and reduce the time, and therefore costs. By engaging with the community to take their collective views, processes and experiences into account the system can aid all funding agencies.

---

**Bibliometrics from the Perspective of Research Funders and Ethical Aspects**

**Ulrike Felt, Head of Department and Professor of Science and Technology Studies, University of Vienna, Austria**

“In rankings we trust” titles a recent paper addressing the puzzle why internet users in contemporary society trust in distributed forms of assessment and ranking practices, e.g. on a website for hotel assessments like tripadvisor. In fact this is but one example of a rising trust in numbers and a love for rankings we can witness across many areas of our lives – academia not being excluded. Indeed in academia we observe a proliferation of rankings and indicators which are supposed to allow for a constant comparative observation of how institutions and people, but also whole societies develop. When it comes to discussing publication patterns, how they are mapped by bibliometric studies and how that in turn relates to academic assessment and increasingly also to the self-understanding of (young) researchers, this presentation will explore two keyquestions: (1) How can we understand the relation between the technological possibilities of (self-) observation through bibliometric analysis and other assessment supporting practices, on the one hand, and publication patterns and practices in the social sciences and humanities? In which ways do they trigger change and adaptation on both sides.

---

**Friday, July 17th: Focus Topic Day 2 – Individual Evaluation**

**Issues with Individual Evaluations in SSH**

**Gunnar Sivertsen, Nordic Institute for Studies in Innovation, Research and Education (NIFU), Oslo, Norway**

This lecture consists of four parts: The publication patterns of the SSH: Scholarly publication types; journals versus books; publications for wider audiences; the use peer review, language and co-authorship; the heterogeneity of publication patterns within the SSH.

Coverage of the SSH in bibliographic databases: Degree of coverage in Scopus and Web of Science; types of publications not covered; alternative data sources; current research information systems.

Referencing and citation patterns in the SSH: References to non-scholarly literature; the age of cited literature; the coverage of cited literature in the citation databases.

Consequences for individual evaluations in the SSH: Expected publication rates; practices of co-authorship and acknowledgments; assessment criteria related to the use of language, publication type, and data source coverage; the validity of citation indicators; bibliometrics to inform peer review; bibliometrics and “research quality” in the SSH.
Google Scholar as a Data Source for Bibliometric Analysis
Nicolas Robinson-Garcia, EC3Metrics spin-off, Universidad de Granada, Spain

Since its emergence in 2004, Google Scholar has attracted a huge interest in the scientific community. More recently, it has also drawn attention not only as an information source but also as a tool for evaluation purposes. The launch of products such as Google Scholar Citations and Metrics or the recent agreement with Thomson Reuters’ Web of Science shows that Google is already a major player in the scientific information market. Its price (free), its huge coverage and the better attention to Social Science and Humanities (compared to commercial databases) has made Google Scholar a potentially valid source for bibliometrics in these areas. Nevertheless, Google Scholar (and their tools) presents many shortcomings that are necessary to know to perform reliable analysis. In this session, we will briefly review Google Scholar pros and cons and will examine the usefulness of tools such as Citations and Metrics.

Bibliometrics and Open Access
Éric Archambault, Science-Metrix, Canada

The Open Access (OA) model for scientific publications has been examined for years by academics who have argued that it presents advantages in increasing accessibility and, consequently, in increasing the impact of papers. It has been noted that OA availability has increased steadily over the years. However, current measurement has seriously underestimated the proportion of OA peer-reviewed articles. Therefore, it is necessary to develop new measurement methods. One challenge is to distinguish more clearly between Gold OA, Hybrid OA and non-fully Gold journals, and self-archiving (‘Green OA’).

This presentation examines the results of recent studies assessing the free availability of scholarly publications during different time periods and the proportion of Open Access Papers published in peer-reviewed journals at different levels. Different types of growth in freely available papers have been identified and analysed.

In conclusion, best practices for institutional repository management will be mentioned and opportunities and challenges faced by the OA model will be examined.

Éric Archambault
Science-Metrix, Canada

Éric Archambault is President and CEO of Science-Metrix and has been a passionate student, analyst, and researcher in the evaluation and measurement of science, technology, and innovation for 25 years. With his extensive knowledge of quantitative methods and the issues surrounding the evolution and monitoring of research, education and S&T policy, Dr. Archambault has directed well over 100 S&T evaluation-, measurement- and policy-related projects during his 10 years as head of Science-Metrix.

Éric graduated in Science, Technology and Society from the Université du Québec à Montréal (UQAM) and obtained an M.Sc. in Science, Technology, and Industrialisation, and a D.Phil. in S&T Policy Studies at the Science Policy Research Unit (SPRU, University of Sussex, UK). Dr. Archambault is a member of the Canadian Evaluation Society and the American Evaluation Association and a Fellow at the Centre for Innovation Studies (THESIS, University of Calgary, Alberta, Canada). He is also a lifetime member of the ISSI (International Society for Scientometrics & Informetrics) and sits on the editorial board of the Scientometrics journal.

Thanks to his initiative, the Science and Technology Indicator Conference (STI), as known as the “Leiden Conference” was held outside Europe for the first time in Montreal from September 6 to 9, 2012 with Éric as co-chair.

Nicola De Bellis
Medical Library – University of Modena and Reggio Emilia, Italy

Graduated in philosophy at the University of Bari, Italy, De Bellis obtained a PhD in history of science in 1998 with a doctoral dissertation on Renaissance natural history. Seven years later, that job provided the background for an Italian prize-winning manuscript on the role of bibliographic citations in the scientific communication system. Having joined a medical library in 2002, he has been working since then on the boundary line between information science, history and philosophy of science. He currently acts as a consultant on bibliometric databases to the academic personnel of the University of Modena and Reggio Emilia.
Linda Butler
College of Arts and Social Sciences, The Australian National University, Australia

Linda Butler holds visiting positions with the Australian National University (School Visitor) and the University of Newcastle (Conjoint Professor) and undertakes contract bibliometric assessments as an independent consultant. She is a leading authority on bibliometric analysis, and has been engaged in the theoretical and empirical study of research evaluation for over 25 years. Her findings on the effects of using publication counts to determine the distribution of research funding to universities have had significant public policy impact. She was a founding member of the Performance Indicators Project, set up at the Australian National University in 1988, and from 1999-2009 was head of the Research Evaluation and Policy Project, which took over and expanded the work of that unit. She is on the editorial boards of Scientometrics and Research Evaluation and has served on the scientific committee of numerous ISSI and S&TI conferences. Ms Butler expertise is widely sought and she has participated in many international expert working groups on indicators, most recently those established by the Council of the Canadian Academies, the OECD, the Higher Education Funding Council of England, and the Canadian Academy of Health Sciences. She chaired the Metrics Working Group set up by the Australian Department of Education, Science and Training to develop the Research Quality Framework, and also advised the Australian Research Council on the Excellence in Research for Australia initiative, which has been operational since 2010. Her research interests include assessing quantitative measures of research performance, with a particular interest in measures for the Humanities, Arts and Social Sciences; using bibliometric techniques to map the organisational structure of national research landscapes, and analyse the relative strengths and weaknesses; the assessment of the impact of research in the broader community, outside academia; and the impact on institutions of the arrival of scholars who have been awarded highly-funded grants from eminent scholars programs.

Rodrigo Costas
CWTS – Centre for Science and Technology Studies, Leiden University, The Netherlands

Rodrigo Costas is an experienced researcher in the field of information science and bibliometrics. With a PhD in Library and Information Science obtained at the CSIC in Spain, Rodrigo has been working at CWTS (Leiden University, the Netherlands) since 2009. His lines of research cover a broad scope of topics, including the development of new bibliometric tools and indicators as well as tools for the study of research activities based on quantitative data, having a particular focus on the analysis of individual scholars through bibliometric methodologies. Rodrigo has recently started some novel research lines at CWTS including the study of ‘altmetrics’ and the possibilities of funding acknowledgments in order to expand the analytical possibilities of scientometrics. At CWTS Rodrigo also coordinates several projects for different scientific organizations worldwide.

Koenraad Debackere
KU Leuven, Belgium

Koenraad Debackere has been with KU Leuven since 1995. He obtained his Ph.D. in Management with an ICM-fellowship at the University of Gent after stays as an ICM-fellow and an ICRMOT research assistant at MIT Sloan School of Management. He was a Fulbright-Hays post-doctoral fellow at MIT in 1991-1992. In 1995 he became professor at KU Leuven. His research has focused on the area of technology and innovation management and policy, the development of indicators for measuring the linkage between science and technology, the design and use of bibliometric indicators for science policy purposes and the role of entrepreneurial universities in economic development. He is coordinator of the Centre for R&D Monitoring (ECOOM)of the Flemish government. He is also actively engaged in technology transfer activity as managing director of KU Leuven Research & Development and Chairman of the Gemma Frisius Fonds (the venture fund) of the KU Leuven.
Hans-Dieter Daniel
ETH Zurich, University of Zurich

Hans-Dieter Daniel holds a dual professorship at ETH Zurich and at the University of Zurich. Since 2001, he is Director of the Evaluation Office of the University of Zurich and since 2002, Professor for Social Psychology and Research on Higher Education at ETH Zurich. Dr. Daniel is a psychologist by training, and a graduate of the University of Konstanz (Germany). He was professor for social science research methods at the Department of Social Sciences of the University of Kassel and director of the International Center for Higher Education Research Kassel (formerly: Center for Research on Higher Education and Work). He is a member of the International Council of Freie Universität Berlin and of the International Advisory Board of the University of Helsinki. From 2005 to 2011 Dr. Daniel was chairman of the Scientific Evaluation Board of the University of Vienna. Since 2009, he has been a member of the international advisory board for the German Rectors’ Conference (HRK) “Audit – Internationalisation of Higher Education Institutions”. In 2008, he was a member of the panel for the evaluation of the support actions of the European Research Council (ERC). Since 2009, Dr. Daniel has been chairman of the Steering Committee of the Center for Scientific Research Management, Spyer (Germany). Since 2011, he has been a member of the Evaluation Committee of the German Council of Science and Humanities (Wissenschaftsrat). Dr. Daniel’s scholarly interests include - Social studies of science with a focus on peer review research (reviewing of research grant proposals, journal manuscripts, and fellowship applications) and evaluative bibliometrics - Research on higher education with an emphasis on students’ evaluation of teaching and study programmes, alumni surveys, and university rankings He is a highly cited researcher and co-author of seven highly cited journal articles (last ten years) in Essential Science Indicators from Thomson Reuters. According to Kostoff (2004, p. 283) his book “Guardians of Science – Fairness and Reliability of Peer Review” is one of the ten “most cited (references) by recent peer review articles retrieved from the Science Citation Index”.

Ulrike Felt
Head of Department and Professor of Science and Technology Studies, University of Vienna, Austria

Ulrike Felt is Professor of Science and Technology Studies, head of the STS Department at the University of Vienna, and Vice-Dean for Research of the Faculty of Social Sciences. She holds a PhD in physics/mathematics and a habilitation in Science and Technology Studies/Sociology of Science. Her research focuses on knowledge politics, changing research cultures including questions of responsible innovation, institutional transformations with special focus on universities, as well as on issues of governance, democracy and public participation in technoscience. She has published widely in these areas. She has been invited professor at numerous universities, has been and is involved in policy advice to the European Commission, to the European Science Foundation as well as to national bodies and is serving on a number of advisory boards of academic institutions as well as on editorial boards of journals. From July 2002 to June 2007 she was editor-in-chief of the international peer-reviewed Journal “Science, Technology, & Human Values”.

Floortje Flippo
Solutions Sales Manager, Research Management, Elsevier

Floortje Flippo is a Solution Sales Manager for Research Management solutions for the Nordics and Benelux at Elsevier. Floortje has been with Elsevier for almost a decade and worked in various roles in Northern and Eastern Europe. Floortje has a background in marketing and economics, before working at Elsevier she co-owned a small company importing goods from Southeast Asia.
Stephan Gauch  
Institute for Research Information and Quality Assurance [iFQ], Germany  
Stephan Gauch studied social science at the University of Mannheim majoring in statistics and methods of empirical social research in fall of 2003. From 2004 to 2008 Stephan Gauch was a researcher in the department of Innovation Systems and Policy at Fraunhofer ISI. Between 2009 and 2014 he has been working at the Berlin Technical University at the Chair of Innovation Economics. From 2012 to 2014 Stephan Gauch was affiliated to Fraunhofer FKUS working on a number of economics- and innovation-related topics in the ICT field such as Big and Open data analytics, policy analysis in the ICT sector, standardization foresight as well as standardization strategies. Stephan Gauch finished his PhD in 2011 on the topic of the interlinkage between research and standardization and the division of labour between formal and informal standardization in ICT. His thesis was awarded with the "Sonderpreis Wissenschaft 2012" of the German Institute for Standardization (DIN). Since 2014 Stephan Gauch is affiliated to iFQ and Humboldt University of Berlin.

Wolfgang Glänzel  
KU Leuven, Belgium  
Wolfgang Glänzel is at KU Leuven since 2002. He is Director of Centre for R&D Monitoring (ECOOM) of the Flemish government and Professor at KU Leuven. He is also affiliated with the Department of Science Policy & Scientometrics at the Library of the Hungarian Academy of Sciences in Budapest (Hungary). Wolfgang Glänzel is skilled mathematician. He holds a doctorate in mathematics from the Eötvös University in Budapest (1984) and a PhD in Science Studies from Leiden University (1997). Wolfgang Glänzel worked at the Library of the Hungarian Academy of Sciences between 1980 and 2001. Wolfgang Glänzel is Research Fellow of the Alexander von Humboldt Foundation. He was awarded the Derek de Solla Price Medal "for outstanding contributions to quantitative studies of science" in 1999. He is Editor-in-Chief of the international journal Scientometrics since 2014. In the same year he has been selected as a Thomson Reuters Highly Cited Researcher in the field of Social Sciences, general [http://highlycited.com].

Juan Gorraiz  
University of Vienna, Austria  
Juan Gorraiz studied physics at the University of Madrid and at the University of Vienna, where he obtained his Doctor’s degree. He is Head of the Document Delivery Services of the Central Library for Physics and of the Bibliometrics and Publication Strategies Department of the Library and Archive Services, University of Vienna. He is working on bibliometric analysis and studies since 1992 and is furthermore teaching at the university course "Library and Information Studies". Organizer and programme chair of the "10th International Conference on Science & Technical Indicators" 2008 in Vienna.

Christian Gumpenberger  
University of Vienna, Austria  
Christian Gumpenberger has a Doctor’s degree in Veterinary Medicine from the University of Veterinary Medicine Vienna and a Master’s degree in Library and Information Studies from the Danube University Krems. He was Head of the Department of Public Services and Reference Librarians at the University Library of the University of Veterinary Medicine Vienna, Head of the Novartis Knowledge Center Vienna as well as Global Project Manager for the Novartis Institutional Repository Project & Open Access Champion at Novartis. He currently runs his own information consultancy business focussing on project management in the field of new trends in scholarly communication, especially Open Access. He is a member of the Bibliometrics and Publication Strategies Department of the Library and Archive Services, University of Vienna and in charge of the esss administration.
Sybille Hinze
Institute for Research Information and Quality Assurance (iFQ), Germany

Sybille Hinze graduated in ‘Management of Science’ from Humboldt-University. From 1990 to 1997 she worked as a research fellow at the Fraunhofer Institute for Systems and Innovation Research. She got her PhD from Leiden University, Centre for Science and Technology Studies (CWTS), the Netherlands in 1997. From 1997-1999 she was a postdoctoral fellow at the Research Evaluation and Policy Project, Australian National University, Canberra. From 1999 to 2008 she held a senior researcher position at Fraunhofer ISI, where she was also deputy head of the competence centre “Policy and Regions”. From March 2005 to August 2006 she was seconded to the European Commission, DG Research, Unit Programming, Monitoring, and Evaluation. Since August 2008 she is deputy director of the Institute for Research Information and Quality Assurance.

Stefan Hornbostel
Institute for Research Information and Quality Assurance (iFQ), Germany, Humboldt-Universität (HU) zu Berlin

Stefan Hornbostel (Director of the iFQ) studied Social Sciences at the University of Göttingen. He did his PhD at the Freie Universität Berlin. After his studies, he worked at the Universities of Kassel, Cologne, Jena and Dortmund, as well as at the Center of Higher Education Development (CHE – Centrum für Hochschulentwicklung). Stefan Hornbostel is Professor at the Department of Social Sciences (Science Studies) at the Humboldt University of Berlin.

Evangelia Lipitakis
Research Analytics Consultant, Thomson Reuters

Since 2013, Evangelia has been a research analytics consultant for European, Middle Eastern and African (EMEA) higher educational institutions, research institutions and research assessment funding bodies (governmental/private) for the Scientific & Scholarly Research (SSSR) division of Thomson Reuters. Evangelia holds a Master’s degree in Management Science and a Ph.D. in Bibliometrics, and specializes in the area of academic research performance evaluation and quantitative methodologies for measuring research performance. Her publications can be found indexed in the Web of Science.

Sarah Heeffer
Centre for R&D Monitoring (ECOOM), KU Leuven, Belgium

Sarah Heeffer studied Germanic philology and received a diploma in library and information science in 2001. She is a member of the ECOOM staff at KU Leuven since 2007. At ECOOM she is active in pre-bibliometrics and since 2011 she is also doing research in bibliometrics. Her topics of interest are author-identification methods and the empirical analysis of download and citation processes. Since 2013 she is Assistant Editor of the international scientific journal Scientometrics, and assumes administrative tasks for the International Society for Scientometrics and Informetrics (ISSI).
Gunnar Sivertsen
Nordic Institute for Studies in Innovation, Research and Education (NIFU), Oslo, Norway

Gunnar Sivertsen is a Research Professor at the Nordic Institute for Studies in Innovation, Research and Education (NIFU) in Oslo. He is specialized in studies of scholarly publishing and in the development and use of bibliometric indicators for statistics, evaluation, funding, and science policy. Sivertsen has a doctoral degree in Scandinavian literature from the University of Oslo.

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

Bart Thijs is a research expert in bibliometrics at the KU Leuven. In 1999 he graduated at the same university in Psychology with a specialization in Statistics. He spent several years in industry as a statistical consultant, there he gained experience in the application of automated data analysis. In 2002 he joined the newly created policy research centre on R&D statistics at the KU Leuven. In 2009 he received his PhD from the Leiden University. Nowadays he is a senior researcher at the Centre for R&D Monitoring (ECOOM). He works on mapping of science based on the application of hybrid techniques.

Tihomir Tsenkulovski
Customer Education and Pre-Sales Specialist, Thomson Reuters

Tihomir Tsenkulovski is a Customer Education Specialist at Thomson Reuters. He attained his Master’s degree at the Fletcher School, Tufts University as a Fulbright scholar and studied Strategic management at Harvard Business School. He was a DAAD fellow in Economics at the Humboldt University in Berlin. During his graduate career, he served as a research assistant at Harvard Law School and led a research project at the University of Pennsylvania. Upon the completion of his degree Tihomir gained experience as an advisor at the United Nations and spent two years as a strategy consultant in the international division of Scholastic Inc. in New York City where he delivered strategy recommendations to the senior management on expanding operations in South America, Europe, the Middle East and Northern Africa. He subsequently managed all research and communication functions on an international project at the International Finance Corporation – the private-sector arm of the World Bank Group – where he facilitated the communication among various departments and partner organizations, produced research papers and policy statements on sustainability-related topics, reported to a high-level working group, conceived a toolkit for the use of small- and medium-sized enterprises in developing countries, organized and co-facilitated multi-stakeholder workshops in the Philippines, Colombia, Kenya, Lebanon and Serbia.

He is currently a specialist of Thomson Reuters products and services dedicated to academic and government research institutions in Germany, Switzerland, Austria, East and Central Europe such as the Web of Knowledge and other scientific solutions in the life sciences, intellectual property and research evaluation and ensures customers’ understanding of the value and functionalities of these intelligent information solutions.

Anthony van Raan
CWTS – Centre for Science and Technology Studies, Leiden University, The Netherlands

Ton (A.F.J.) van Raan is Professor of Quantitative Studies of Science. Founder and until 2010 Director of the Centre for Science and Technology Studies (CWTS), Leiden University, Netherlands. After his retirement as Director of CWTS, he remained research professor. He studied mathematics, physics and astronomy at Utrecht University. PhD in Physics, Utrecht (1973). Post-doctoral fellow (1973-1977) at the University of Bielefeld (Germany), visiting scientist in the US, UK, and France. Work in atomic physics, laser-physics, astrophysics, and in science policy and research management. From 1977 senior research fellow physics in Leiden, in 1985 ‘field switch’ from physics to science and technology studies, 1991 Professor. His research focuses on design, construction and application of quantitative indicators of important aspects of scientific research and on mapping of research fields. Long standing and broad experience in the practical application of bibliometric methods in contract research for governments, the European Commission, research organizations, universities and research institutions all over the world, and the business sector, particularly publishers. Main research interests: application of bibliometric indicators in research
evaluation; science as a self-organizing cognitive ecosystem, statistical and in particular scaling properties of bibliometric indicators, ranking and benchmarking of universities, mapping of science. Next to research he set up successful international teaching activities such as the CWTS Graduate Course Measuring Science. In 1995 he received together with the American sociologist Robert K. Merton, the Derek de Solla Price Award, the highest international award in the field of quantitative studies of science. From 2013 he is adviser of the Netherlands Minister of Internal Affairs on urban policy of knowledge-intensive cities. From 2014 he is adviser of the European Research Council (ERC) in the Expert Group for Programme Monitoring and Evaluation. He published (as author and co-author) around thirty articles in physics and two hundred in science and technology studies. He is editor of the Handbook of Quantitative Studies of Science and Technology (Elsevier) and member of the editorial board of the international journals Scientometrics, Research Evaluation, and Journal of Informetrics. Prof. van Raan set up a small spin-off company for advice on research evaluation and science policy issues. On the occasion of his retirement as CWTS director he was awarded by the Queen of the Netherlands with the royal distinction of Knight in the Order of the Dutch Lion. More info: http://www.cwts.nl/tvr/.

Giles Radford
Head of Professional Services, UberResearch GmbH, Germany

Giles spent more than twenty years working for the Wellcome Trust, one of the largest independent biomedical research charities in the world. He was responsible for the development of their grants management system, and it was whilst he was working there, trying to improve the Wellcome Trust’s information systems, that he realised that intelligent software and comprehensive data were critical to any funder’s mission. At UberResearch he is Head of Professional Services, helping clients maximise the benefits of Dimensions, both to aid strategic decision-making and to reduce the burden of operational activities, such as peer review.

Martin Reinhart
Institute for Research Information and Quality Assurance (iFQ), Humboldt University, Germany

Prof. Dr. Martin Reinhart studied Sociology, Economics and Computer Science at the University of Basel (Switzerland), specialising in Science Studies and the work of Robert K. Merton. From 2004 to 2010 he did his doctorate in the context of a research project about peer review procedures in science at the Science Studies Program in Basel. From 2010 he was a lecturer at the Universities Basel, Lucerne, and ETH Zürich and from 2011 post-doc in the research project “Reproducibility and Innovation – Boundary Work in Science” at the Collegium Helveticum (ETH Zürich). Since September 2012 he is assistant professor at the Humboldt-University and the iFQ.

Nicolas Robinson-Garcia
EC3Metrics spin-off, Universidad de Granada, Spain

PhD in Social Sciences University of Granada, Spain. Nicolas works as external consultant for the firm EC3Metrics spin-off and is member of the EC3 research group, University of Granada. His main research interests are university rankings and institutional evaluation, and the use of new data sources for bibliometric analysis. He has published several papers in international journals on university rankings, the evaluation of monographs and the use of new data sources such as Google Scholar or Altmetric.com for research evaluation.

Matthias Winterhager
Institute for Interdisciplinary Studies of Science / AG Bibliometrie, Bielefeld University, Germany

Matthias Winterhager is senior researcher and coordinator of bibliometric studies at Bielefeld University, Institute for Interdisciplinary Studies of Science (I²SoS), Germany. He studied electrical engineering, education, psychology and sociology at TU Berlin and Bielefeld University. From 1980 he worked together with Peter Weingart on science indicators and quantitative studies of science at Bielefeld University.
social events

Leuven Guided Tour
Wednesday, July 15th, 18.00-19.30
Meeting Point: Entrance Stadhuis (Town Hall), Grote Markt 9

The guides will explain you the history of the medieval Leuven. From the Market Square, with the 15th century Town Hall and the Gothic St. Peter’s Church, we start a walk along the Old Market. During the academic year it is at the centre of student nightlife with a wide choice of bars, cafes and restaurants. Besides students, also lots of locals come to enjoy their meal or drink a beer here. The place is often called the longest bar counter in the world.

From this lively part of the city we step into an oasis of peace and quiet, the Groot Begijnhof. As a community for unmarried, semi-religious women this béguinage originated in the early 13th century. This fully restored historical neighbourhood is a succession of picturesque streets, squares, gardens and parks, with dozens of houses and convents in traditional brick and sandstone style.

We return to the heart of town by strolling along green short cuts through the university colleges, such as the Van Dale and Hoge Heuvel College, the Arras College, the City Garden, the Aula Pieter de Somer, the Pope College and the University Hall. Each location is colored with other aspects of the rich university life. End of the tour at the Town Hall about 19.30.

Beguinage Guided Tour (before Dinner)
Thursday, July 16th, 18.30

Meeting point: Entrance courtyard Faculty of Business & Economics Naamsestraat 69

The walk starts in the courtyard aside the House of Sestich. From there, the guides take you on a walk by crossing the street and passing through the inner yards and garden of the Van Dale College. We arrive at the Grand Beguinage (Groot Begijnhof in Dutch), one of the UNESCO World Heritage Sites, originating from the beginning 13th century, a well preserved and restored historical quarter containing about a dozen streets in downtown Leuven. Up to around 300 beguines stayed at the beguinage at times. The last beguine died in 1988. Beguins (begijnen) took temporary vows of chastity and obedience. They were able to have private property and an income. More prosperous beguines had a private residence, while poorer beguines lived together in community houses. The Groot Begijnhof is now owned by the University and houses students and academic staff.

Conference Dinner
Thursday, July 16th, 19.45

Restaurant Faculty Club
Groot Begijnhof 14

A walking buffet will be served in the Faculty Club, located in the former hospital and farm buildings of the Beguinage at 19.45 in the Lemaire Room.
The esss is held in annual rotation at each of the organizing institutions. This year’s host is the KU Leuven. Leuven is a historic charming student city, and all venues are within 10-20 minutes walking distance.

**Tutorial Day and Conference**

Hogenheuvelcollege

HOGS 00.10 – Registration and Breaks
HOGM 00.85 – Lectures
HOGC 00.50 – Breaks and Lunch
Naamsestraat 69
BE 3000 Leuven

**Seminars**

Van Den Heuvelinstituut

VHI 02.40
PC-Classes:
E1 room 01.23
F1 room 01.24
Dekenstraat 2
BE 3000 Leuven

**Social Events**

**Meeting Point Leuven Guided Tour**
**Wednesday, July 15th, 18.00**
**Town Hall**
Grote Markt 9
BE 3000 Leuven

**Meeting Point Beguinage Guided Tour**
**Thursday, July 16th, 18.30**
**HOG**
Naamsestraat 69
BE 3000 Leuven

**Conference Dinner**
**Thursday, July 16th, 19.45**
**Restaurant Faculty Club**
Groot Begijnhof 14
BE 3000 Leuven
Regular partners:

THOMSON REUTERS
ELSEVIER
Science-Metrix

esss | European Summer School for Scientometrics
Boltzmanngasse 5
A-1090 Vienna | Austria
T: +43-1-4277-276 18
M: +43-664-60277-27618
office@scientometrics-school.eu
http://www.scientometrics-school.eu