

esss 2015: AND THE SUCCESS STORY OF BIBLIOMETRIC EDUCATION CONTINUES

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It was the second time that the KU Leuven hosted the European Summer School for Scientometrics (esss), which took place on 12 – 17 July 2015^(1,2,3,4,5). And, like in the previous years, the six-day event was fully booked (50 persons) within only a few weeks after registration opened.

Traditionally, the esss 2015 started with a tutorial day on Sunday, 12 July, an introductory crash course for esss participants with only basic or no prior knowledge in the field and the tools used for bibliometrics. Thus, attendees could familiarise themselves with the main terms and concepts of bibliometrics based on presentations and discussions with members of the esss steering committee Wolfgang Glänzel (KU Leuven), Sybille Hinze (iFQ) and Juan Gorraiz (University of Vienna).

The theoretical part of the crash course was followed by an introduction on the most renowned citation databases, Web of Science Core Collection (WoS CC) and Scopus, given by representatives of Thomson Reuters and Elsevier respectively. Tihomir Tsenkulovski informed about the new available features in WoS CC, while Floortje Flippo guided the audience through the most recent version of Scopus.

On Monday, 13 July, Wolfgang Glänzel officially opened the esss 2015 and gave a warm welcome to the attendees of this year's event in Leuven. This first lectures day, dedicated to "Bibliometric Concepts, Indicators and Data Sources", was subsequently started by Stefan Hornbostel (iFQ) with a concise overview of the history, institutionalisation

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Picture 1. Bibliometric Crash Course with Wolfgang Glänzel

and concepts of bibliometrics, followed by Wolfgang Glänzel and Juan Gorraiz, who gave a brief introduction to the most important bibliometric data sources.

Sybille Hinze shed light on the most relevant scientometric indicators, their construction and potential applications. In his very original and Dantesque presentation, Stephan Gauch (iFQ) illustrated how the relevance of classifications and how they can shape bibliometric analyses. He provided a deeper and more informed insight into the real meaning of using classifications.

The afternoon session reflected the esss tradition of bringing together a very internationalised and prestigious group of speakers who impressively illustrated how bibliometrics can be put into practice. Linda Butler (The Australian National University) demonstrated, how institutions are assessed in the context of ERA, the Excellence in Research for Australia initiative. The role of citation- and concept-networks as a basis for the construction of performance indicators and science maps was the central topic of Anthony van Raan’s talk, founder of CWTS at Leiden University (Nether-

lands) one of the first institutions focusing on bibliometrics. Afterwards, Koenraad Debackere (KU Leuven) demonstrated how modern science policies is making use of bibliometric data and indicators to assess the scientific performance of research institutions, research groups and even individual researchers. Finally, Evangelia Lipitakis (Research Analytics Consultant, Thomson Reuters), who gave insight into “Assessing Research Performance Using Thomson Reuters Analytics Solutions”.

The following two seminars days were characterised by lectures in the morning sessions and hands-on sessions with practical exercises in the afternoon. Tuesday, July 14, dedicated to “Data Handling”, was started by Matthias Winterhager (Bielefeld University, Germany). He explained the cumbersome and crucial task of Data Cleaning and Processing, which is an essential precondition for bibliometric analyses.

Wolfgang Glänzel discussed the necessities, challenges and options of “Author Identification”. He reported on results of his research and experiences from real life exercises. Wolfgang Glänzel also introduced the

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Picture 2. Stefan Hornbostel

issues of “Subject Normalisation” as a fundamental requirement for citation analysis in a multidisciplinary environment due to discipline specific publication and citation behaviour. He explained the two fundamental approaches, the so-called source- and citing-side normalisation, or, using another terminology, the a priori and a posteriori normalisation and discussed advantages and disadvantages of both methods.

The morning session closed with “Journal Impact Measures”, jointly presented by Wolfgang Glänzel, focusing on the strengths and weaknesses of the best known and most controversial “Journal Impact Factor” and Juan Gorraiz, who introduced alternative impact measures like Eigenfactor metrics, SJR and SNIP.

The exercises in the afternoon reflected these issues and participants had the opportunity to transfer the knowledge they acquired into practice. For example exer-

cises dealing with data cleaning, retrieving journal impact measures, calculating indicators based on different databases offered the possibility to turn knowledge into skills.

“Collaboration and Networks” were in the center of lectures, seminars and practical exercises on Wednesday. Bart Thijs (Centre for R&D Monitoring, KU Leuven, Belgium), shed light on applications of network analysis in science studies to uncover relations, structures and developments among different actors in science. Wolfgang Glänzel focused on co-authorship, which is used as a proxy for research collaboration in the case of institutional or international collaboration. He thereby revealed important information about main actors and their role in the network of scholarly communication.

“Structures in Science and Options for their Visualisation”, an important and emerging trend in the field, was the cen-

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Picture 3: Audience at the esss in Leuven

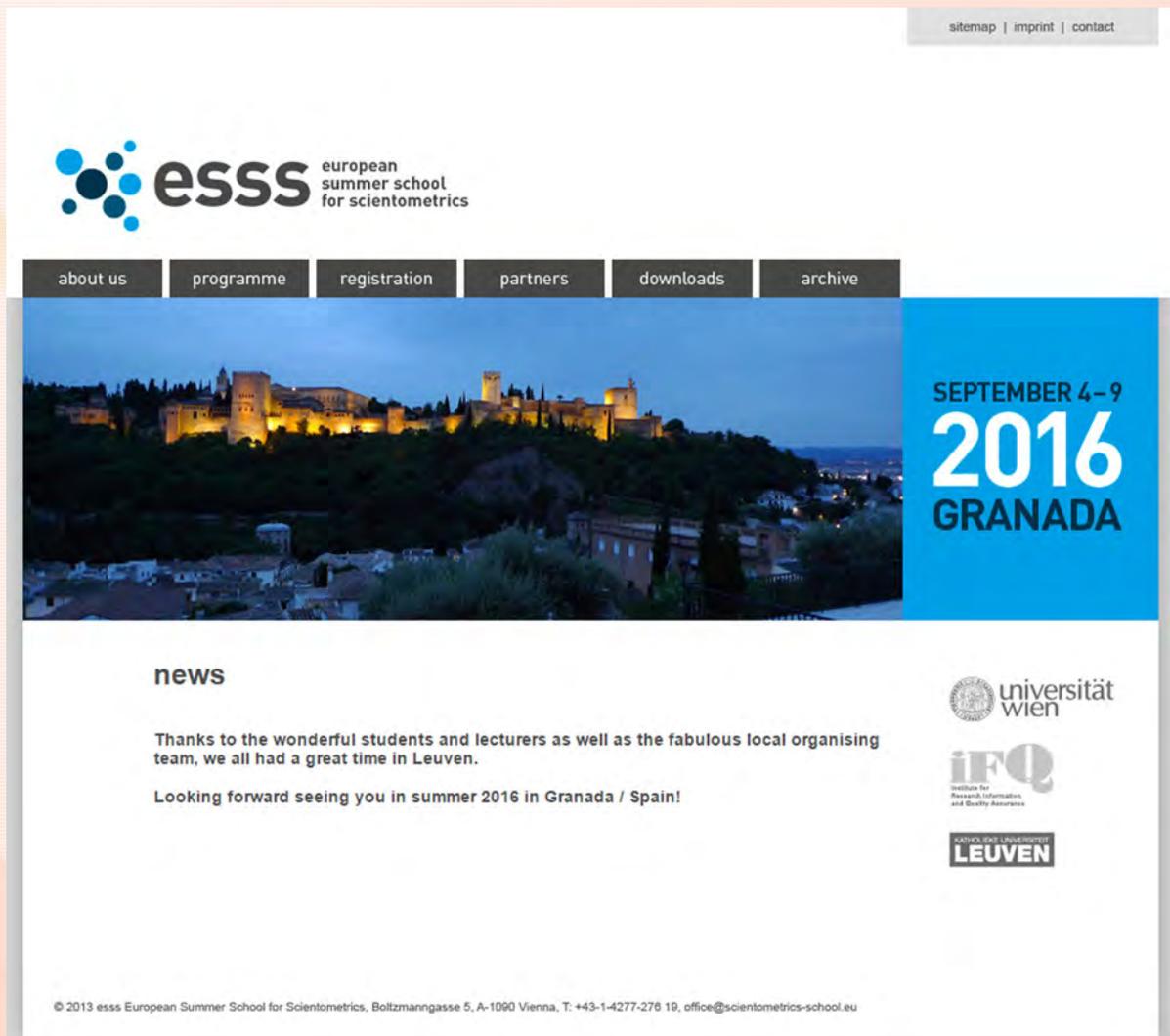
terpiece of all following sessions introducing relevant tools like Gephi, Bibexcel and Pajek. Again, esss attendees were given the opportunity to practice the newly acquired knowledge and create maps on their own by using the different visualisation tools supported by Wolfgang Glänzel, Bart Thijs and Sarah Heffer (Centre for R&D Monitoring, KU Leuven) and Juan Gorraiz and Nicola De Bellis (Medical Library, University of Modena and Reggio Emilia, Italy).

As in the previous years also the 2015 edition of the esss had a specific focus topic. This year one day was specifically devoted to one of the “hot” topics in the context of assessments “Individual Evaluation”.

Invited speakers shed light on the options, challenges, limitations and problems around the assessment of individuals, not only focusing on bibliometrics in a very narrow sense but also looking beyond the bibliometricians toolset. Rodrigo Costas (CWTS, Leiden University, Netherlands) gave a brief introduction by highlighting the most important aspects that bibliometric practitioners need to take into account when performing individual-level analysis. Hans Dieter Daniel (ETH Zürich, Switzerland) reported on peer review as the most

important mechanism for quality control in science, and Martin Reinhard (iFQ), discussed popular ways of (quantitatively) assessing individual researchers and asked, whether bibliometric tools are reasonable predictors for future success or not. Finally, Juan Gorraiz focused on the academic point of view, based on his expertise as head of the Bibliometrics and Publication Strategies Department at the University of Vienna. He presented the tailor-made Viennese services for both, academic and administrative university staff, particularly considering professorial appointments.

In the afternoon session, Giles Radford (ÜberResearch GmbH, Germany) introduced a tool developed by ÜberResearch that supports the selection of experts for Peer Review procedures. In his presentation he gave examples of how automated natural language process approaches can be used and support peer selection based on thematic similarities. Concluding this day’s lectures, Ulrike Felt (University of Vienna) delivered a thought-provoking talk addressing the proliferation of rankings and indicators in academia as well as ethical aspects. She prepared the ground for the “bibliometric agora”, a discussion forum that has



Picture 4: Announcement of the *esss* 2016, Granada (screenshot, *esss* homepage)

become a highly appreciated feature of the *esss* course structure within the last years.

Moderated by Juan Gorraiz, the agora in Leuven featuring Ulrike Felt and Hans Dieter Daniel quickly evolved into a lively, vivid and controversial dispute among the panelists but also with the audience on questions like: In which form and under which conditions can bibliometrics be an enhancement of the peer review process? What are ideal preconditions for an “informed peer reviewer”? How can bibliometric practices distort established publication cultures? Furthermore the Leiden Manifesto and its call for more standards in metric based assessments were debated.

On the last day of the *esss*, Gunnar Sivertsen (NIFU, Oslo, Norway) grabbed the audience’s attention by talking about

specific requirements when it comes to applying bibliometrics in the Social Sciences and Humanities (SSH). He explained the specificities of the publication and citation behaviour, the coverage of the SSH in bibliographic databases and the consequences for using bibliometrics for individual evaluations. He also introduced the solution implemented in Norway to tackle the problems he described. Dealing with Google Scholar (GS), Nicolas Robinson-Garcia (EC-3Metrics spin-off, Universidad de Granada, Spain) discussed usefulness of GS as a tool for evaluation purposes. Last, but not least, Éric Archambault (Science-Metrix, Canada), dealt with the development toward Open Access (OA) publishing and the potential relevance and consequences for bibliometric analysis. His presentation examined the

results of recent studies assessing the free availability of scholarly publications. Finally, best practice recommendations for institutional repository management were provided, taking into account the challenges to be faced by OA models.

To conclude, this year's *esss* active participation of the participants was called for in just another practical hands-on exercise. Participants were given the task to step-by-step carry out their own bibliometric analysis. They were presented with various tasks and asked to present their results to the audience. Wolfgang Glänzel, Bart Thijs, Sarah Heeffer, Pei-Shan Chi, Mariëtte Du Plessis, Lin Zhang, Sybille Hinze, Linda Butler and Juan Gorraiz permanently supported the group works.

Finally in a Q&A session the organisers were happy to answer questions that remained open after a demanding week before officially closing the event in the late afternoon.

esss 2015 was once again an international event beyond European borders with participants from 22 countries from four continents including Australia, Austria, Belgium, Brazil, Czech Republic, Denmark, Estonia, Germany, Lithuania, Netherlands, Norway, Poland, Portugal, Russia, Slovakia, South Korea, Spain, Sweden, Switzerland, Taiwan, United Kingdom and the United States.

The overall feedback gained from personal encounters and conversations as well as resulting from the evaluation of a survey among participants, was very positive and inspiring. Besides the pleasant and stimulating atmosphere throughout the whole course and the high quality of all lectures, the participants particularly enjoyed the social events: The Leuven Guided Tour, where we were given the opportunity to stroll through the medieval part of the city and the Beguinage, the famous historical quarter and UNESCO World Heritage site, as well as a delightful conference dinner in the Faculty Club, located at the former hospital and farm buildings of the Beguinage. The *esss* organisers are therefore encouraged to

maintain and continuously improve this learning opportunity, which seems to be high in demand even after six years.

The organisers are already looking forward to next year's event, which will be held at the University of Granada in Spain, September 4-9. Participants can expect a varied mix of theory and hands-on training adapted to our focus topic "New Metrics".

As usual further announcements will be made via the *esss* website (www.scientometrics-school.eu) and via the *esss* mailing list (to register please send an informal email to office@scientometrics-school.eu).

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