

2nd International Workshop on Bibliometric-enhanced Information Retrieval (BIR2015)



Workshop at ECIR 2015

March 29, 2015

You are invited to participate in the upcoming 2nd workshop on **Bibliometric-enhanced Information Retrieval (BIR)**, to be held as part of the [37th European Conference on Information Retrieval \(ECIR\)](http://ceur-ws.org/Vol-1344/).

All workshop papers have been published in the CEUR Workshop Proceedings.
<http://ceur-ws.org/Vol-1344/>

Keynote Speaker:

[Guillaume Cabanac](#) (University of Toulouse, France)

[Slides](#)

Workshop program

Half day workshop from 1:45 pm - 5:15 pm (3,5 h). The workshop will be held at the **Favoritenstrasse 9-11**.

- Introduction (10 min) [Paper](#) | [Presentation](#)
- Keynote (2:00 pm)
In Praise of Interdisciplinary Research through Scientometrics by Guillaume Cabanac [Paper](#) | [Presentation](#)
- Session 1 (3:00 pm)
 - Anna Dabrowska and Birger Larsen: **Exploiting Citation Contexts for Physics Retrieval** (10 min) [Paper](#) | [Presentation](#)
 - Marc Bertin and Iana Atanassova: **Factorial Correspondence Analysis Applied to Citation Contexts** (10 min) [Paper](#) | [Presentation](#)
 - Group discussion (30 min)
- Break
- Session 2 (4:00 pm)
 - Ian Wesley-Smith, Ralph Dandrea and Jevin West: **An Experimental Platform for Scholarly Article Recommendation** (10 min) [Paper](#) | [Presentation](#)
 - Zeljko Carevic and Philipp Mayr: **Extending search facilities via bibliometric-enhanced stratagems** (10 min) [Paper](#) | [Presentation](#)

- Muhammad Kamran Abbasi and Ingo Frommholz: **Polyrepresentative Clustering: A Study of Simulated User Strategies and Representations** (10 min) [Paper](#) | [Presentation](#)
- Group discussion (30 min)
- Conclusions, feedback and further steps
- Welcome Reception (Foyer) (5:30 pm)

Important Dates

- Submissions: **08 February 2015 (extended)**
- Notification: 27 February 2015
- Camera Ready Contributions: 13 March 2015
- Workshop: 29 March 2015 in Vienna, Austria

Introduction

Bibliometric techniques are not yet widely used to enhance retrieval processes in digital libraries, although they offer value-added effects for users. In this workshop we will explore how statistical modelling of scholarship, such as Bradfordizing or network analysis of coauthorship network, or simple citation graphs, can improve retrieval services for specific communities, as well as for large, cross-domain collections like Mendeley. This workshop aims to raise awareness of the missing link between Information Retrieval (IR) and bibliometrics/scientometrics and to create a common ground for the incorporation of bibliometric-enhanced services into retrieval at the scholarly search engine interface.

The second BIR workshop (BIR2015) addresses scholarly and explicitly industrial researchers. Our interests include information retrieval, information seeking, science modelling, network analysis, and digital libraries. The goal is to apply insights from bibliometrics, scientometrics, and informetrics to concrete, practical problems of information retrieval and browsing.

Aim of the Workshop

In this second workshop (see [papers and presentations of the first workshop](#)) we aim to engage with the IR community about possible links to bibliometrics and complex network theory which also explores networks of scholarly communication. Bibliometric techniques are not yet widely used to enhance retrieval processes in digital libraries, yet they offer value-added effects for users. Our interests include information retrieval, information seeking, science modelling, network analysis, and digital libraries. The goal is to apply insights from bibliometrics, scientometrics, and informetrics to concrete practical problems of information retrieval and browsing.

Retrieval evaluations have shown that simple text-based retrieval methods scale up well but do not progress. Traditional retrieval has reached a high level in terms of measures like precision and recall, but scientists and scholars still face challenges present since the early days of digital libraries: mismatches between search terms and indexing terms, overload from result sets that are too large and complex, and the drawbacks of text-based relevance rankings. Therefore we will focus on statistical modelling and corresponding visualizations of the evolving science system. Such analyses have revealed not only the fundamental laws of Bradford and Lotka, but also network structures and dynamic mechanisms in scientific production. Statistical models of scholarly activities are increasingly used to evaluate

specialties, to forecast and discover research trends, and to shape science policy. Their use as tools in navigating scientific information in public digital libraries is a promising but still relatively new development. We will explore how statistical modelling of scholarship can improve retrieval services for specific communities, as well as for large, cross-domain collections. Some of these techniques are already used in working systems but not well integrated in larger scholarly IR environments.

The availability of new IR test collections that contain citation and bibliographic information like the iSearch collection or the ACL collection could deliver enough ground to interest (again) the IR community in these kind of bibliographic systems. The long-term research goal is to develop and evaluate new approaches based on informetrics and bibliometrics.

The aim of this workshop is to bring together researchers from different domains, such as information retrieval, information seeking, science modelling, bibliometrics, scientometrics, network analysis, and digital libraries to move toward a deeper understanding of this research challenge.

Workshop Topics

To support the previously described goals the workshop topics include (but are not limited to) the following:

- IR for digital libraries and scientific information portals
- IR for scientific domains, e.g. social sciences, life sciences etc.
- Information Seeking Behaviour
- Bibliometrics, citation analysis and network analysis for IR
- Query expansion and relevance feedback approaches
- Science Modelling (both formal & empirical)
- Task based user modelling, interaction, and personalisation
- (Long-term) Evaluation methods and test collection design
- Collaborative information handling and information sharing
- Classification, categorisation and clustering approaches
- Information extraction (including topic detection, entity and relation extraction)
- Recommendations based on explicit and implicit user feedback

We especially invite descriptions of running projects and ongoing work. Papers that investigate multiple themes directly are especially welcome.

Submission Details

All submissions must be written in English following Springer LNCS author guidelines (4 to 8 pages) and should be submitted as PDF files to EasyChair. All submissions will be reviewed by at least two independent reviewers. Please be aware of the fact that at least one author per paper needs to register for the workshop and attend the workshop to present the work. In case of no-show the paper (even if accepted) will be deleted from the proceedings AND from the program.

Springer LNCS: <http://www.springer.com/lncs>

EasyChair: <https://easychair.org/conferences/?conf=bir20150>

Workshop proceedings will be deposited online in the CEUR workshop proceedings publication service (ISSN 1613-0073) - This way the proceedings will be permanently available and citable (digital persistent identifiers and long term preservation).

Programm Committee

- Marc Bertin, Université du Québec à Montréal (Canada)
- José Borbinha, INESC-ID/IST (Portugal)
- Guillaume Cabanac, University of Toulouse (France)
- Cornelia Caragea, University of North Texas (USA)
- Martine De Cock, Ghent University (Belgium)
- Ed A. Fox, Virginia Tech (USA)
- Norbert Fuhr, University of Duisburg-Essen (Germany)
- Björn Hammarfelt, University of Borås (Sweden)
- Peter Ingwersen, University of Copenhagen (Denmark)
- C. Lee Giles, Pennsylvania State University (USA)
- Birger Larsen, Aalborg University (Denmark)
- Claus-Peter Klas, University of Hagen (Germany)
- Kris Jack, Mendeley (UK)
- Stasa Milojevic, Indiana University (USA)
- Stephen Robertson, University College London (UK)
- Philipp Schaer, GESIS (Germany)
- Henry Small, SciTech Strategies (USA)
- Lynda Tamine-Lechani, University Paul Sabatier (France)
- Simone Teufel, University of Cambridge (UK)
- Howard D. White, Drexel University (USA)
- Ludo Waltman, CWTS (NL)
- Dietmar Wolfram, University of Wisconsin (USA)

This workshop is also informed by an ongoing COST Action TD1210 [KnowEscape](#).

Organizers

- [Philipp Mayr](#), GESIS - Leibniz Institute for the Social Sciences, German
- [Ingo Frommholz](#), University of Bedfordshire in Luton, UK
- [Peter Mutschke](#), GESIS - Leibniz Institute for the Social Sciences, Germany
- [Andrea Scharnhorst](#), DANS, Royal Netherlands Academy of Arts and Sciences in Amsterdam, Netherlands