

# 8th International Workshop on Bibliometric-enhanced Information Retrieval (BIR 2019)



## Updates

CEUR workshop proceedings are published: <http://ceur-ws.org/Vol-2345/>

Keynote by Dr. **Iana Atanassova**, CRIT, Université de Bourgogne Franche-Comté, France  
Title of the talk: **Beyond Metadata: the New Challenges in Mining Scientific Papers**



**Abstract:** Scientific articles make use of complex argumentative structures whose exploitation from a computational point of view is an important challenge. The exploration of scientific corpora involves methods and techniques from Natural Language Processing in order to develop applications in the field of Information Retrieval, Automatic Synthesis, citation analyses or ontological population. Among the problems that remain to be addressed in this domain is the developing fine-grained analysis of the text content of articles to identify specific semantic categories such as the expression of uncertainty and controversy that are an integral part of the scientific process. The well-known IMRaD structure (Introduction, Methods, Results, and Discussion) is standard template that governs the structure of articles in experimental sciences and provides clearly identifiable text units. We study the internal structure of articles from several different perspectives and report on the processing of a large sample extracted from the PLOS corpus. On the one hand, we analyze citation contexts with respect to their positions, verbs used and similarities across the different sections, and on the other hand, we quantify text re-use in abstracts as well as other phenomena such as the expression of uncertainty. The production of standard datasets dedicated to such tasks is now necessary and would provide favorable environment for the development of new approaches, e.g. using neural networks that require large amounts of labeled data.

## Program

Time	Speaker	Title
9:00	Organizers	<a href="#">Introduction</a>
9:05	<b>Iana Atanassova</b> (Keynote)	<a href="#">Beyond Metadata: the New Challenges in Mining Scientific Papers</a>
9:50	Tarek Saier and Michael Färber	<a href="#">Bibliometric-Enhanced arXiv: A Data Set for Paper-Based and Citation-Based Tasks</a>
10:10	Julien Perier-Camby, Marc Bertin, Iana Atanassova and Frédéric Armetta	<a href="#">A preliminary study to compare deep learning with rule-based approaches for citation classification</a>
10:30	<i>Coffee break</i>	
11:00	Robin Haunschild and Werner Marx	<a href="#">Discovering seminal works with marker papers</a>
11:20	Gineke Wiggers and Suzan Verberne	<a href="#">Citation Metrics for Legal Information Retrieval Systems</a>
11:40	Boris Lykke Nielsen, Stefan Lavlund Skau, Florian Meier and Birger Larsen	<a href="#">Optimal Citation Context Window Sizes for Biomedical Retrieval</a>
12:00	Jaewon Kim, Johanne R. Trippas, Mark Sanderson, Zhifeng Bao and W. Bruce Croft	<a href="#">How do Computer Scientists Use Google Scholar?: A Survey of User Interest in Elements on SERPs and Author Profile Pages</a>
12:20-13:30	<i>Lunch break</i>	
13:30	Juan Pablo Bascur, Nees Jan van Eck and Ludo Waltman	<a href="#">An interactive visual tool for scientific literature search: Proposal and algorithmic specification</a>
13:50	Iacopo Vagliano and Sibgha Nazir	<a href="#">Recommending Multimedia Educational Resources on the MOVING Platform</a>
14:10	Tejas Shah and Vikram Pudi	<a href="#">Mining Intellectual Influence Associations</a>
14:30	Jean-Charles Lamirel and Pascal Cuxac	<a href="#">Feature selection and graph representation for an analysis of science fields evolution: an application to the digital library ISTEX</a>
14:50	<i>Coffee break</i>	
15:30	Renaud Fabre	<a href="#">A "Searchable" Space with Routes for Querying Scientific Information</a>
15:45	Michael Färber and Adam Jatowt	<a href="#">Finding Temporal Trends of Scientific Concepts</a>
16:00	Alexander Shvets	<a href="#">Improving Scientific Article Visibility by Neural Title Simplification</a>
16:15	Posters and Interactive Session	
17:30	Closing	
18:00	Social Event	

## Accepted Long Presentations

- Robin Haunschild and Werner Marx: Discovering seminal works with marker papers

- Jaewon Kim, Johanne R Trippas, Mark Sanderson, Zhifeng Bao and W.Bruce Croft: How do Computer Scientists Use Google Scholar?: A Survey of User Interest in Elements on SERPs and Author Profile Pages
- Gineke Wiggers and Suzan Verberne: Citation Metrics for Legal Information Retrieval Systems
- Tarek Saier and Michael Färber: Bibliometric-Enhanced arXiv: A Data Set for Paper-Based and Citation-Based Tasks
- Tejas Shah and Vikram Pudi: Mining Intellectual Influence Associations
- Birger Larsen and Florian Meier: Optimal Citation Context Window Sizes for Biomedical Retrieval
- Juan Pablo Bascur, Nees Jan van Eck and Ludo Waltman: An interactive visual tool for scientific literature search: Proposal and algorithmic specification
- Jean-Charles Lamirel and Pascal Cuxac: Combination of feature selection with clustering and graph representation for accurate analysis of science fields evolution: an application to the digital library ISTEX

### **Accepted Short Presentations**

- Renaud Fabre: A "Searchable" Space with Routes, for Querying Scientific Information
- Michael Färber and Adam Jatowt: Finding Temporal Trends of Scientific Concepts
- Julien Perier-Camby, Marc Bertin, Iana Atanassova and Frederic Armetta: A preliminary study to compare deep learning and rule-based approaches for citations classification
- Alexander Shvets: Improving Scientific Article Visibility by Neural Title Simplification

### **Accepted Demo Presentation**

- Iacopo Vagliano and Sibgha Nazir: Recommending Multimedia Educational Resources on the MOVING Platform

### **Workshop at ECIR 2019, 14 April 2019**

You are invited to submit to the 8th international workshop on Bibliometric-enhanced Information Retrieval (BIR 2019), to be held as part of the 41st European Conference on Information Retrieval (ECIR 2019). <https://www.ecir2019.org/>