



## Identification, location and temporal evolution of topics Data and algorithm – comparison of approaches

Library and Information Centre of the Hungarian Academy of Sciences  
Arany János st. 1, 1051 Budapest  
29-30 August 2016

The KNOWeSCAPE COST workshop builds on a series of workshops in Berlin, Amsterdam, Istanbul about research diversity and the metrical challenge to delineate topics. At the Budapest event, experts are invited to present their approaches to identify and trace topic evolution over time. Among them is a group of researchers (Same data, different results – special session at ISSI 2015) who will present their insights concerning different methods for topic delineation, and ways to compare them to a wider audience. Three additional topics will be addressed: How to organise a topic delineation challenge in the metrics community? How to best engage with experts in the evaluation of topics maps and their evolution? How can the science of topic delineation, and, science mapping in general, better inform taxonomies of scientific research used in research evaluation? The latter points are of particular interest for the social sciences and humanities, which are increasingly exposed to metric based evaluative practices.

Invited experts include:

**KEVIN BOYACK** (SciTech Strategies, Inc, USA)

**PETRA AHRWEILER** (EA European Academy of Technology and Innovation Assessment GmbH, Germany)

**JUDIT BAR-ILAN** (Bar-Ilan University, Israel)

The workshop is supported by the COST Action TD1210 Knowescape, and the FP7 Project Impact-EV.

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**KNOWeSCAPE**



## Workshop program

Monday 29<sup>th</sup> August 2016

08.30 Registration

09.00 Welcome

09.15 **Theresa Velden**: Mapping the cognitive structure of astrophysics combining different levels of organization: a citation and journal based approach

09.45 **Wolfgang Glänzel**: Lexical analysis of scientific publications for nano-level scientometrics

10.15 Coffee Break

10.45 **Kevin Boyack**: The Tradeoff between Altruism and Economic Growth in the Research Focus of Nations

11.15 **Tim Evans**: The Location of Papers in Topic Space-Time

11.45 **Edgar Schiebel**: Bibliometric field delineation with heat maps of bibliographically coupled publications using core documents and a cluster approach—the case of multiscale simulation and modelling

12.15 **George Kampis**: Blindfolded NLP: Unsupervised Learning for Automatically Generating Topic Labels

12.45 Lunch Break

### Panels and Discussions

14.15 Author panel on the *Scientometrics* special issue „Same data, different results”  
Facilitator: **Andrea Scharnhorst**

15.45 Coffee Break

16.15 Validation methods for topic extraction results (Discussion)  
Facilitator: **Jochen Gläser**

Tuesday 30<sup>th</sup> August 2016

09.30 **Marcus John**: Technology foresight and the concept of emerging topics

10.00 **Sándor Soós**: Disciplinary structure and topical complexity in SSH—the IMPACT EV mission

10.30 Coffee Break

11.00 **Haluk Bingol**: Context sensitive article ranking with citation context analysis

11.30 **Péter Polner**: Quantifying the changing role of past publications

12.00 **Gergely Tibély**: Hierarchical organisation of scientific journals

12.30 Lunch Break

### Panels and Discussions

14.00 Andrea Scharnhorst: Future plans on the challenge of topic extraction (Discussion)  
Facilitator: **Theresa Velden**

15.00 Synergies with the IMPACT EV project (Discussion for participants of the project)  
Facilitator: **Sándor Soós**



KNEWeSCAPE „Analyzing the dynamics of information and knowledge landscapes”  
<http://knowescape.org/>

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