COST
EUROPEAN COOPERATION IN SCIENCE AND TECHNOLOGY

COST Action TD1210   2013 | 2017

KNOWeSCAPE

Analyzing the dynamics of information and knowledge landscapes

Materials, Physics & Nanosciences (MPNS)

Participating countries: 36

AT, BA, BE, BG, CH, CY, CZ, DE, DK, EE, EL, ES, FI, FR, HR, HU, IE, IL, IS, IT, LT, LU, LV, MK, MT, NL, NO, PL, PT, RO, RS, SI, SK, SE, TR, UK

Internat. Collaboration:

AR, AU, NZ, ZA, RU, US, CN, JP, ...

Objectives

◆ O1: **Analysis and models of knowledge spaces** [Data models, new algorithms, understanding of social processes]

◆ O2: **Maps as navigation tools through knowledge spaces** [Exploring different ways to use knowledge maps]

◆ O3: **Guidelines for implementing knowledge maps** [For heritage institutions, for information providers]

Working Groups

■ **WG 1: Phenomenology of knowledge spaces**
Evolution of classification systems

■ **WG 2: Theory of knowledge spaces**
Emergence of collective emotions (CYBEREMOTIONS)
Memory in network flows

■ **WG 3: Visual analytics**
Phylomemetic patterns in science evolution

■ **WG 4: Data curation**
User behaviour in repositories
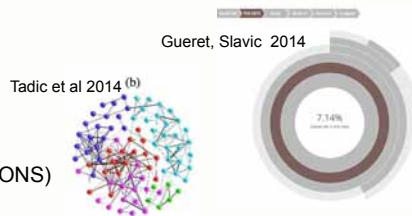
Gueret, Slavic 2014

Tadic et al 2014 (b)
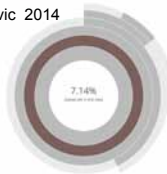
Chavalarias et al 2013, 2014
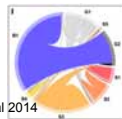
Van Hoek et al 2014

Main Achievements

■ 66 Publications [2 monographs, 1 conference proceedings, 1 PhD thesis]

Heymann, S. (2014). Exploratory Link Stream Analysis for Event Detection. PhD Thesis l'UNIVERSITÉ PIERRE ET MARIE CURIE.

Rodrigues, E., Swan, A., & Baptista, A. A. (2013). Uma Década de Acesso Aberto na UMinho e no Mundo (p. 261). Braga, Portugal: Universidade do Minho, Serviços de Documentação.

Slavic, A., Akdag Salah, A., & Davies, S. (Eds.). (2013). Classification & visualization: Interfaces to knowledge ; proceedings of the International UDC Seminar 24 - 25 October 2013. Würzburg: Ergon Verlag.

Vitanov, N. K., Dimitrova, Z. I., & Vitanov, K. N. (2014). Science dynamics and scientific productivity. Sofia: Publishing House ´Vanio Nedkov.

■ SME – creative industry links – LearnDiscovery

Gender Balance and Early Stage Researcher

■ About 30 new members joined the Action during the GP1.
■ 88 individual participants are involved in the Action work. (34 % female; 31 % ESR)
■ 17 STSM (6 = 35% female researcher, 14=82% ESR)

Dissemination

KnoweScape - Bibliography of members
Owned by Andrea Scharnhorst

This is the bibliography of publications of the member of the COST Action TD1210.

Recent papers in this group
Phylomemetic patterns in science evolution—the rise and fall of scientific fields.
David Chavalarias, Jean-Philippe Cointet
PloS one, Volume: 8, Issue: 2 (2013)
Memory in network flows and its effects on community detection, ranking, and spreading
Martin Rosvall, Alcides V. Esquivel, Andrea Lancichinetti, Jevin D. West, Renaud Lambiotte
ArXiv, (2013)
Identifying User Behavior in domain-specific Repositories
Wilko van Hoek, Wei Shen, Philipp Mayr
Arxiv Digital Libraries (cs.DL); 1403.7899, Elpub Conference 2014, (2014)

Contact details

Chair of the Action
Dr. Andrea Scharnhorst
Andrea.Scharnhorst@dans.knaw.nl
Domain Committee Rapporteur
Professor Joaquim Manuel Vieira

Science Officer (COST Office)
Giuseppe Luggano

Action Website
www.knowescape.org

First-order Markov   Second-order Markov
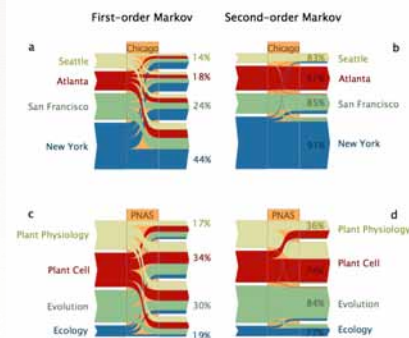
Rosvall et al 2014

COST is supported by the EU RTD Framework Programme

ESF provides the COST Office through a European Commission contract

EUROPEAN SCIENCE FOUNDATION