ISSI 2013 Workshop:
Standards for Science Mapping and Classifications

Purpose: Create an action agenda for improved standardization across the various metrics and indicators created by the scientometrics community

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Program:

16:15 Overview of 2011 Workshop results -- Börner and Larivière
16:30 Introductions - Participants
   (Note to ALL: Please create three slides that report your own research as it relates to the workshop; state most challenging problem(s); provide bio & picture. Share slides with vincent.lariviere@umontreal.ca)
17:00 Brainstorm Groups*
   S&T classifications (Börner, Larivière);
   S&T mapping standards (Boyack, Scharnhorst);
   S&T stakeholders (Bar-Ilan, Wagner)
17:30 Brainstorm Groups Report Back
   Identify challenges and opportunities, key developments, funding possibilities
   Comments and discussion
18:00 Collaborative Teaming Opportunities
   Who wants to collaborate on what with whom?
   Who are potential stakeholders who are not present?
   What other developments, activities are going on?

Goal:

This workshop will build on and extend the JSMF Workshop on Standards for Science Metrics, Classifications, and Mapping held August 11-12, 2011 at Indiana University in Bloomington, IN (http://scimaps.org/meeting/110810/). It will bring together researchers and practitioners interested in the scientific development and proper usage of science classifications and science maps. Discussion of existing approaches, tools, and techniques will provide a point of departure for a convergence of thought on the challenges and opportunities for developing scientifically sound standards for measuring and communicating the structure and dynamics of science and technology (S&T).

* Group leadership assistance being provided by Kevin Boyack and Judit Bar-Ilan

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Discussion items:

**S&T Classifications**
Strengths, weaknesses, and limitations of existing classifications
Properties of a good classification system in a science mapping context
Properties of a good classification system for metrics
  *Are classification properties for science mapping and metrics compatible?*
Development of new classifications at the paper level
  *How to take account of nature/methods/objects/citation characteristics?*
Dynamically evolving classifications that can capture historical data
Classification of interdisciplinary papers/journals, and what databases to use

**S&T Mapping Standards**
Strengths, weaknesses, and limitations of existing science maps
Properties of a good science map
  *Are standards emerging across academic/government/industry use?*
Aligning S&T classifications/maps with other ontologies, taxonomies

**S&T Stakeholders**
Who are the stakeholders of a global research information system, and what influence do they have within the system? (national research policy, funding agencies, research institutions, publishers, libraries and archives, technology drivers, W3C, creative industries)
Can there be a global standard for scientometrics?
What are priorities in terms of type of standards (which databases to use, and when?); scope (output: journals, books, media; input: grants and projects, education); copyright and privacy issues (empower the researcher in the process of tracing and evaluating them); evaluation?
How do grass-roots, bottom-up dynamics influence the existing institutional landscape? Who disseminates and coordinates developed standards?

Ideally, the workshop leads to:
Consensus on action around emerging and accepted standards
Joint publications among us in major journals


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