Google Scholar: The Next Big Thing?

Gordon C. Tibbits
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Gordon Tibbitts
President Blackwell Publishing
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First, Related To Google Scholar: CrossRef Search

Brief History of CrossRefSearch
• 2002 prototype with FAST (Scirus)
• Too costly

• And then…

• 2003 plan a pilot with Google
• CrossRef Search pilot launch April 2004
• Now 35 publishers, 6.4 million items
Does Google Matter?

- Yes!

Google-referred Downloads
More On CrossRef Search

• CrossRef Search uses the Google index
• Results set filters out non-CrossRef
• Displayed on publishers’ sites, e.g.:
  http://www.ieeexplore.ieee.org
  http://www.interscience.wiley.com
• User survey responses positive
• And then…

Google Scholar™
• Launched November 2004
• Strong immediate uptake, lots of press
• Usage flattening?
• Separate index
• Not up-to-date
• It’s a beta; improvements in the works

http://scholar.google.com/
http://scholar.google.com/

• Includes: peer-reviewed papers, theses, books, preprints, abstracts and technical reports from all broad areas of research from publishers, societies, preprint servers, IR’s, and authors’ websites etc.
• A chance at a new relevance ranking: they are coordinating with the CRS steering committee on this issue
• Publisher may have a chance at a higher level “business” influence with Google. GS may have a better chance of being pushed by Google than CRS (carrying CRS along)
• Admittedly, Google Scholar, without publishers full-text content, would be substantively less useful and perhaps not worthwhile. CRS will continue to play a role in influencing this initiative and other collaborative initiatives with other search engine providers
Compare search on a technical term in Google (463,000 results)…
... with results given same term in CrossRef Search Pilot (1,990 results)
Google Scholar - asperger - Microsoft Internet Explorer

Scholar

Results 1 - 10 of about 4,010 for asperger [definition] (0.05 seconds)

Asperger's syndrome: A clinical account
L. Wing - Cited by 123 - Web Search
Asperger's syndrome: a clinical account. Wing L. The clinical features, cause, etiology, epidemiology, differential diagnosis ...
Psychological Medicine, 1981 - ncbi.nlm.nih.gov

Asperger syndrome
U. Frith - Cited by 62 - Library Search - Web Search

The epidemiology of Asperger syndrome. A total population study
S. Ehlers, C. Gillberg - Cited by 86 - Web Search
The epidemiology of Asperger syndrome. ... This paper describes a total population study of Asperger syndrome using a two-stage procedure. ...

... advanced test of theory of mind: evidence from very high functioning adults with autism or Asperger ...
S. Baron-Cohen, T. Jolliffe, C. Mortimore, M. ... - Cited by 69 - Web Search
Another advanced test of theory of mind: evidence from very high functioning adults with autism or asperger syndrome. Baron-Cohen ...

Die autistischen Psychopathen im Kindesalter
WIP and Anomolies😊
The following words are very common and were not included in your search: The for the in. [details]

Results 1 - 6 of 6 for The Measurement Bench for the LHC Spool Corrector Magnets in Industry
(0.07 seconds)

The Measurement Bench for the LHC Spool Corrector Magnets in Industry
A Am, SA Arshad, C Giloux, F Patru, H Reymond, R ... - View as HTML - Web Search
... The Measurement Bench for the LHC Spool Corrector Magnets in Industry. A. Am, SA Arshad, C. Giloux, F. Patru, H. Reymond, R. Senis, and L. Valskiers. T. Page ...
Applied Superconductivity, IEEE Transactions on, 2002 - m.home.cern.ch - ieeexplore.ieee.org

Further Development of the Sextupole and Decapole Spool Corrector Magnets for the LHC
LHC CERN, S Geneva - Web Search
... A. In the LHC the MCS spool correctors will ... Nazionale ci Fisica Nucleare (INFN) and another at CAT through Petr's Analog and Digital Measurement CO Ltd. ...
ieeexplore.ieee.org

Magnetic Measurement of Alignment of Main LHC Dipoles and Associated Correctors
L Bottura, A Buzio, G Deforme, P Schnizer, P ... - View as HTML - Web Search
... cold conditions (at room temperature, the cold mass is optically accessible and therefore a direct measurement can be ... bench @ 0.5T) 0.02 ... LHC requirement – 1. ...
Applied Superconductivity, IEEE Transactions on, 2002 - m.home.cern.ch - ieeexplore.ieee.org

MARCH 2002 VOLUME 12 NUMBER 1 ITASE9 (ISSN 1051-8223)
AH Arshad, A IJspeert, M Karppinen, D Krischel, J ... - Web Search
... Construction and Measurement of the Pre-Series Twin Aperture Resistive ... Construction of the High Performance, Low-Cost Superconducting LHC Corrector Magnets ... ...
ieeexplore.ieee.org

Yinshun Wang, Liye Xiao, Liangzhen Lin, Shaotao Dai, and Ming Qiu
The Measurement Bench for the LHC Spool Corrector Magnets in Industry

A. Am, S. A. Arched, C. Giloux, F. Pature, R. Reymond, R. Sens, and L. Walckiers

Abstract—The LHC accelerator will be equipped with more than 3600 superconducting spool corrector magnets. CERN has awarded the contract for the series production and testing of these corrector magnets to industry. Magnetic field measurements are done at the factory.

Dedicated magnetic measurement benches have been built to test these corrector magnets in the resistive state at room temperature. The benches allow to measure the strength of the main field, normal and skew harmonics, the magnetic axis of the magnet, and the position of the magnetic axis with respect to the mechanical reference points.

II. THE BENCH FOR ROOM TEMPERATURE MAGNETIC MEASUREMENTS

A. Functional Description

The quality of the magnetic field and magnetic axis alignment depends on the precision of the magnet code and the alignment of the corrector magnets on the transport. It also depends on the corrector magnets alignment on the mechanical bench.
What Have We Learned From The Process

• Being indexed properly requires care
  Those Publishers that are about to have content scanned by Google have to do some serious planning including content cleaning, metadata tuning and getting ready to be crawled
• The main Google index is inflexible and is not tooled for archival content
• Google Scholar is under-resourced
What CrossRef Is Working On With Google Now

• CrossRef is partnering with Google
  – Hosting DOI’s, supporting CrossRef Search, and forming Publisher bi-lateral agreements
  – This is a non-exclusive relationship
  – We have some terms of engagement; shared principles

• CrossRef Search to use Scholar index

• CrossRef Search as a valuable subset of Google Scholar (perhaps on advanced search page)
What Have We Learned in General From The Experience

- Google is an unusual partner – copyright comes to mind
- Nothing is free: integration/optimization of systems and content, feature development, marketing, and influencing all cost money
- Stakeholders, for instance: researchers, students, and librarians, have differing views of quality and value and therefore what they will pay
- Branding and attribution of content in a “big-search-engine-space” will be difficult, critical and may only be achievable collectively
- It is evident that incomplete search services (the broad ones: Google etc, and the narrow ones: publisher sites etc) need an integrative strategy in order to retain value
QUESTIONS
The following slides are for information purposes only
OTHER INFORMATION: Brief CrossRef History

- CrossRef launched early 2000
- Reference-linking, with DOIs
- CNRI’s Handle system
- Now 350 members (60% nonprofit), approx. 1000 publishers
- Tony Durniak, Chairman of the Board
- 15 million items/DOIs: journal articles, conference proceedings, book chapters
- CrossRef Mission
  - “To provide services that bring the scholar to authoritative primary content, focusing on services that are best achieved through collective agreement by publishers.”
CrossRef Search: What We Have Learned

• Publishers vary in their view of level and scope of involvement with Google (some level of engagement is inevitable)
• Just getting CRS and even Google crawling and indexing your content, and metadata development, is non-trivial
• Ranking is their ranking; CRS are advocating DOI-based and some quality-based ranking approaches (*note: Google Scholar may be the first to try this*)
• Lots of publishers want “Functionality-Type” improvement, though should this be something Google does or the publishers, or the Libraries, Federated Search agents?
• Answering the Coverage issue is critical (and not isolated to CRS or Google Search)
• SO FAR: 85% of users said good-to-excellent (idea?), 76% said search was successful, 85% said domain-restricted good, 79% find full-text indexing happy (CrossRef CRS survey 2004)
CrossRef Search: What We Have Learned

• What is CRS for the un-initiated
  • A cross-disciplinary, full text search of journals, books, and conference proceedings
  • 29-publisher pilot, 3.4 million items indexed, with current as well as back-file documents
  • Domain restricted: usually Google search but with results limited to participating publishers’ content
  • Index content also searchable via regular Google interface