



*Co-ordination & Harmonisation of Advanced e-Infrastructures
for Research and Education Data Sharing*

The CHAIN-REDS Semantic Search Engine

UbuntuNet Connect 2013 – 14-15 November 2013

R. Barbera^{1,2}, C. Carrubba², G. Inserra², R. Mayo-García³, R. Ricceri²
¹ U. Catania - ² INFN – ³ CIEMAT

Research Infrastructures – Proposal n. 306819



www.chain-project.eu
proj-office@chain-project.eu



- ▶ Introductory concepts and driving considerations
- ▶ The CHAIN-REDS Knowledge Base
- ▶ The KLIOS semantic enrichment
- ▶ Semantic search on CHAIN-REDS Linked Data
- ▶ Summary and conclusions

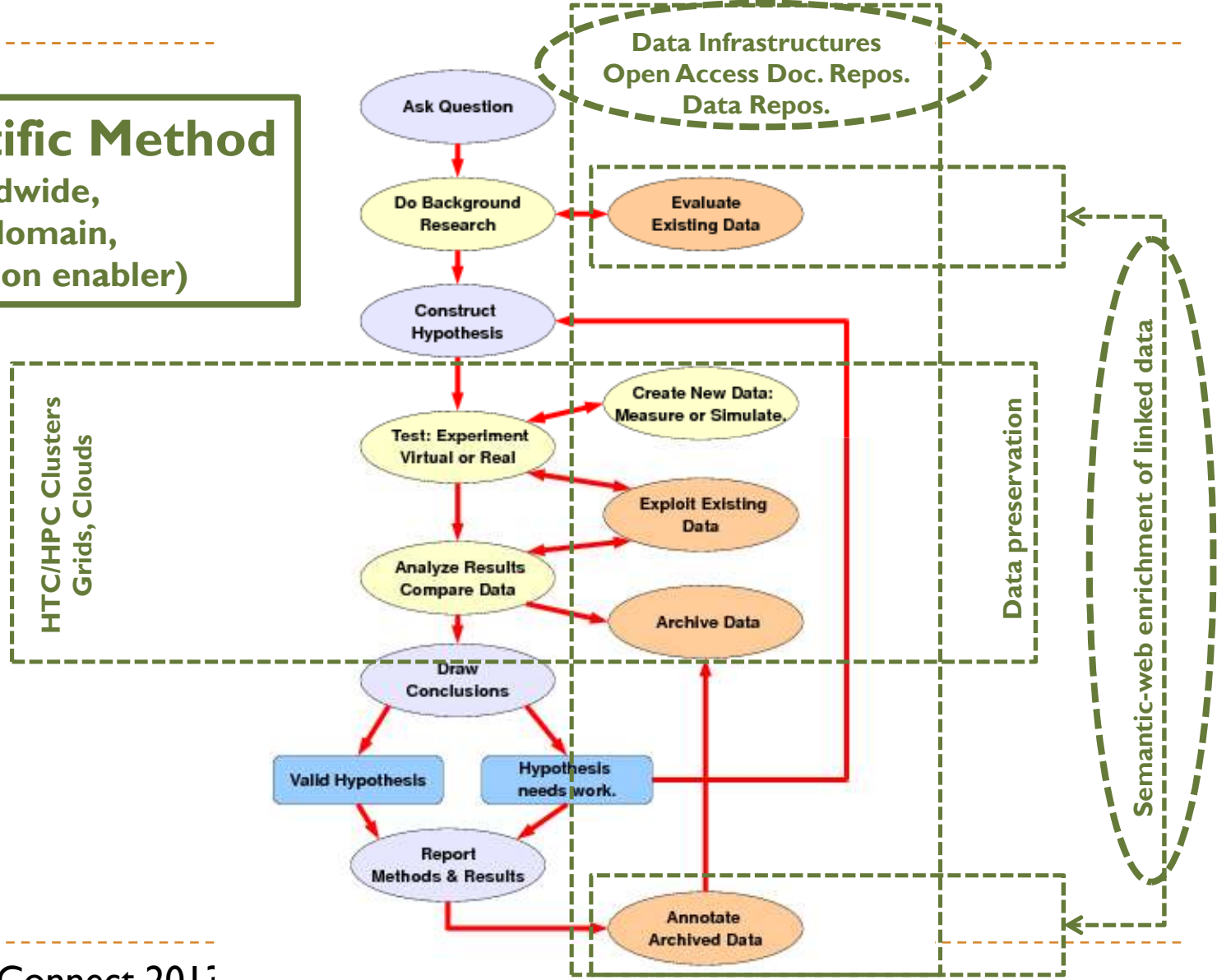
“e’-Infrastructure is an environment where research resources (hardware, software and content) can be readily shared and accessed where necessary to promote better and more effective research. Such environments integrate hard-, soft- and middleware components, networks, data repositories, and all sorts of support enabling virtual research collaborations to flourish globally.” (*)

(*) EC-endorsed definition:

<http://cordis.europa.eu/ictresults/index.cfm?ID=90825§ion=news&tpl=article>

What do researchers do and how can e-I's help them to improve it ?

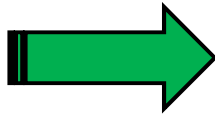
The Scientific Method
 (worldwide, cross-domain, collaboration enabler)





The CHAIN-REDS Project

(www.chain-project.eu)



Started: 1 Dec 2012
Duration: 30 months
Targeted regions: Africa,
Arab Region, Latin America,
China, India, and
Far-East Asia

Objectives



Extend and consolidate the international cooperation of Europe with other regions of the world in the domain of e-Infrastructures for R&E, thus reinforcing the scientific collaboration and broadening the impact of the European Research Area



Promote, coordinate and support the effort of a critical mass of non-European e-Infrastructures for R&E to collaborate with Europe by addressing interoperability and interoperation of Grids and other DCIs such as potential upcoming Cloud federations and HPC centres



Study the opportunities of data sharing across different e-Infrastructures and continents thus widening the scope of the existing CHAIN Knowledge Base to Data Infrastructures and Cloud implementations



Promote trust-building towards open Scientific Data infrastructures across the world regions, including organisational, operational and technical aspects



Demonstrate the relevance of intercontinental cooperation in several scientific data fields addressing existing and emerging Virtual Research Communities (e.g. Earth Science, Climate Change, Genomics, etc.) and propose pragmatic approaches that could impact the everyday work of the single researcher, even if not structured in the framework of a Virtual Research Community



Provide guidance and recommendations for roadmaps for long-term global collaboration in e-Infrastructures and harmonisation of existing policies. These are envisaged to act as input to policy and decision-making mechanism, harmonised with the European Digital Agenda and Horizon 2020



The CHAIN-REDS virtuous cycle



○ UbuntuNet Connect 2013 – 14-15 November 2013

STANDARDS

The CHAIN Knowledge Base

(www.chain-project.eu/knowledge-base)


Largest e-Infrastructure related knowledge base. Information both from the survey and other sources for more than half of the countries of the world

Country View [Site View](#) [Table View](#)

To navigate the map, click on the continent and then on the countries where you see a pin in correspondence of their capitals.
To see some detailed information you must have your personal certificate installed in the web browser.

tool by ammap.com

Europe



The image shows a world map interface. The map is color-coded by continent: Europe is orange, Africa is dark orange, South America is green, and Australia is dark green. A red arrow points to the African continent. Above the map, there are navigation tabs for 'Country View', 'Site View', and 'Table View'. Below the tabs, there is instructional text and a dropdown menu currently set to 'Europe'. The map is credited to 'ammap.com'.

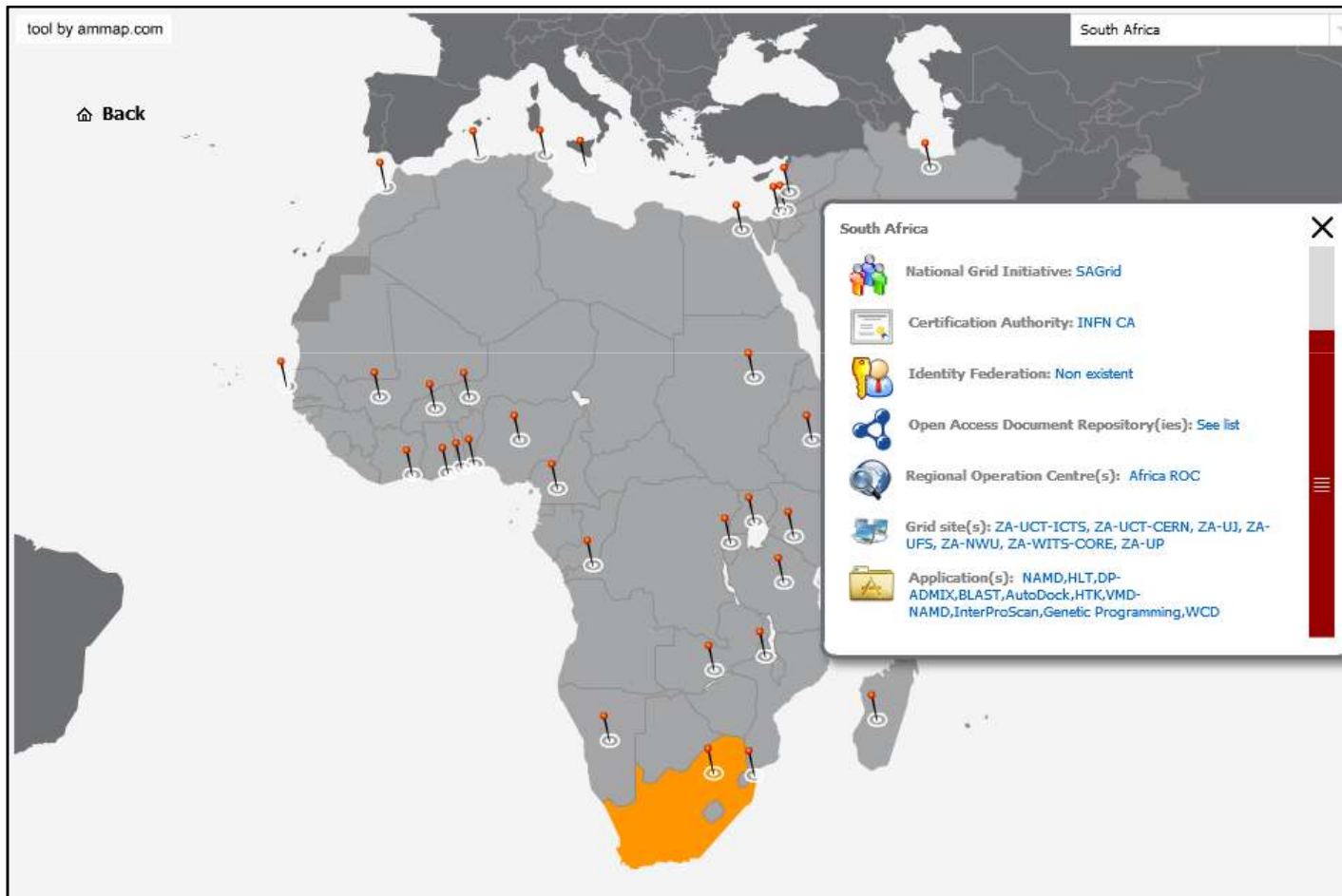
The CHAIN Knowledge Base

(www.chain-project.eu/knowledge-base)



The CHAIN Knowledge Base

(www.chain-project.eu/knowledge-base)



- ▶ RREN(s)
- ▶ NREN
- ▶ NGI
- ▶ CA(s)
- ▶ Ident. Fed(s)
- ▶ ROC(s)
- ▶ Grid site(s)
- ▶ Application(s)
- ▶ and more...



The CHAIN Knowledge Base

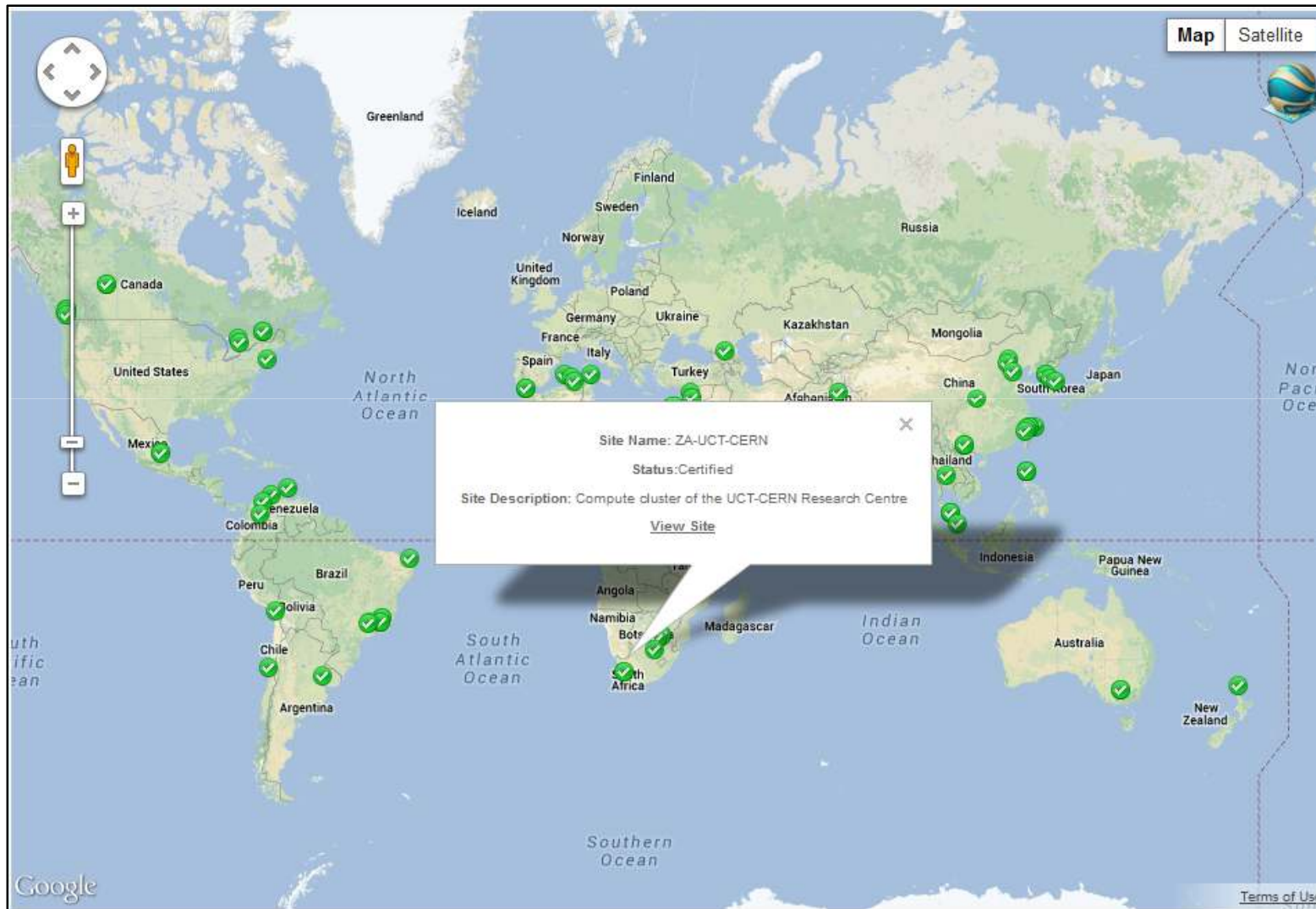
(www.chain-project.eu/knowledge-base)






The CHAIN Knowledge Base

(www.chain-project.eu/knowledge-base)





Africa & Arabia ROC

GOCDB

- [Home](#)

Resources

- [Browse Sites](#)
- [Add a New Site](#)
- [Browse Services](#)
- [Add a New Service](#)
- [Browse ROCs/NGIs](#)

Downtimes

- [Recent & Planned](#)
- [Archives](#)
- [Add a Downtime](#)

About GOCDB4




- [Doc, Help & Support](#)

User Status

Unregistered user

[Register a New Account](#)
[Retrieve an Old Account](#)

Search

Site Object 211

Actions

You are not authorised to perform any action on this object

Parameter	Value
Short Name	ZA-UCT-CERN
Official Name	University of Cape Town
Home Url	http://www.uct.ac.za/
Giis Url	ldap://ce-uct-cern.uct.ac.za:2170
Ip Range	
Operatinghours Start	
Operatinghours End	
Location	Cape Town, South Africa
Latitude	-33.9567
Longitude	18.461
Description	Compute cluster of the UCT-CERN Research Centre
Creation Date	
Email	za-uct-cern-ops@lists.sagrid.ac.za
Contacttel	+39-095-3785517
Emergencytel	
Csirtemail	
Csirttel	
Emergencyemail	
Helpdeskemail	za-uct-cern-ops@lists.sagrid.ac.za



CHAIN-REDS program for Data Infrastructure

- ▶ Identify standards to easily gather and access both Open Access Document Repositories (OADRs) and Data Repositories (DRs)
 - ▶ OAI-PMH, Dublin Core, SPARQL, XML, PID
- ▶ Build a demonstrator to easily visualise and access OADRs and DRs (both geo-views and tab-views)
- ▶ Correlate OADRs and DRs to create linked data and discover new knowledge through semantic enrichment of metadata



CHAIN-REDS program for Data Infrastructure

- ▶ Promote Data Infrastructure standards and identify new OADRs and DRs from regions addressed by the project (Africa, Middle-East and Gulf Region, Latin America, China, India, Far-East Asia)
 - ▶ A survey was carried out during 2013
- ▶ Populate the demonstrator with these new repositories, add them to the semantic enrichment tool, and set-up at least two use-cases from different domains for a whole data use
 - ▶ Search for data → Retrieve data → Use them as an input for an application → execute that application unattendedly in several infrastructures (HPC, Grid, Cloud) → Obtain the results → Save them (and their metadata) for feeding back the cycle

Open Access Document Repositories (OADRs)



- ~2,500 repos
- >33 M docs

Registry of Open Access Repositories (ROAR)






Open Access Document Repositories (OADRs)

Show 10 entries

Country	Name	Domain	Organization
South Africa	Stellenbosch University SUNScholar Repository	Multidisciplinary	Stellenbosch University
South Africa	University of Fort Hare Institutional Repository	Agriculture, Food and Veterinary, Biology and Biochemistry, Ecology and Environment, Education, Health and Medicine, Law and Politics, Management and Planning, Physics and Astronomy	University of Fort Hare
South Africa	University of Limpopo	Agriculture, Food and Veterinary, Biology and Biochemistry, Earth and Planetary Sciences, Education, Health and Medicine, Language and Literature, Law and Politics, Management and Planning, Multidisciplinary	University of Limpopo
South Africa	Wits Uninstitutional Repository on DSPACE	Multidisciplinary	University of the Witwatersrand, Johannesburg
South Africa	UKZN ResearchSpace	Multidisciplinary	University of KwaZulu-Natal
South Africa	VUT DigiResearch	Business and Economics, Computers and IT, Management and Planning, Technology General	Vaal University of Technology
South Africa	OpenSALDRU	Multidisciplinary	Southern African Labour and Development Research Unit, University of Cape Town
South Africa	ResearchSpace@UKZN	Multidisciplinary	UKZN

Showing 21 to 28 of 28 entries (filtered from 2,479 total entries)



ECHO
EUROPEAN CULTURAL HERITAGE ONLINE

Search

About the ECHO Initiative

Promotion Activities


Intranet

Full text search

ECHO CONTENT **ECHO TECHNOLOGY** **ECHO NETWORK** **ECHO POLICY**

ECHO – Cultural Heritage Online

Open Access Infrastructure for a Future Web of Culture and Science





Available in ECHO

- more than 1000 authors and editors represented by ECHO collections
- 95 seed collections in several disciplines and thematic fields, in particular history of science
- more than 206,600 catalogued documents
- more than 890,000 high resolution images of historical and cultural source documents and artefacts
- more than 240 film sequences of scientific source material
- more than 57,500 full-text page transcriptions in several languages
- more than 170 institutions from 24 countries worldwide as active knowledge weavers in ECHO


How to join

Interested institutions and projects, who share the vision of ECHO are invited to join the bring in cultural heritage, research source material and scholarly metadata related to the

▶ [Contact](#)

[CONTACT](#) [IMPRESSUM](#) Last Update: April 2013



ECHO Papacino d' Antoni, Alessandro Vittorio, Physikalisch-mathematische Grundsätze der Artillerie in denen die Natur und Eigenschaften des Pulvers untersucht und durch viele gründliche Erfahrungen ins Licht gesetzt werden, 1768

Image: Thumbnail overview Document information

List of thumbnails page | << 7 of 543 >>

1 2 3 4 5 6 7 8 9 10

Physikalisch - Mathematische Grundsätze der Artillerie in denen die Natur und Eigenschaften des Pulvers untersucht und durch viele und gründliche Erfahrungen ins Licht gesetzt werden.

Aus dem Italienischen des Herrn Papacino d'Antoni Dr. Med. Machin in Sardinien Director der sardinischen Artillerie bei Turin mit Genehmigen.

Vor Ansehen verachtet





G. J. Tempelhoff, L. Dr. Buchhändler bei dem Hof-Druckerey-Verlag.

Berlin, bey Amsth. Wehr, 1768.

Data Repositories (DRs)

Copy Print Save Search: South Africa

Show 10 entries First Previous 1 Next Last

Country	Name	Domain	Organization
 South Africa	Africa Centre for Health and Population Studies	Demography, Economics, Biology, HIV infections, Medicine	University of KwaZulu-Natal, College of Health Sciences
 South Africa	DataFirst	South Africa, Surveys, Demographic surveys, Health surveys, Population, Census	University of Cape Town
 South Africa	South African Data Archive (SADA)	Census, Demography, Education, Business, Labor, Household surveys, Health, Substance abuse, Income, Crime, Poverty, Politics and culture	National Research Foundation
 South Africa	South African Earth Observation Network (SAEON)	Environmental sciences, South Africa, Research, Research and development projects, Science, Grasslands, Wetlands, Marine biodiversity, Coastal ecology	National Research Foundation

Showing 1 to 4 of 4 entries (filtered from 596 total entries) First Previous 1 Next Last

Data Repositories (DRs)

ahds arts and humanities data service

Search Collections
Creating Resources
Depositing Resources
News and Events
About the AHDS
Projects
Search Site

Enabling Digital Resources for the Arts and Humanities

Latest News

From April 2008 the Arts and Humanities Data Service (AHDS) will no longer be funded to provide a national service. However, the JISC have very kindly provided funding for a further year to keep the website available, to maintain and update the AHDS cross-search catalogue, and for the Centres to continue to deliver AHDS collections. The catalogue will allow users to search across the collections of the AHDS partners, including new collections added after 31st March. To use the cross-search catalogue please use the link on the left hand side.

Despite the loss of central funding, the host institutions of the AHDS are committed to working separately and together to retain the expertise and skills of the staff of the AHDS, and to provide a revised set of services for the arts and humanities research community. For further details about the services on offer please click on the links on the right:

AHDS website content

- Executive
- Archaeology
- History

Powered by Highslide JS

CCP database for ADS

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CCP sherd #,site,unit x,unit y,context,exc. she
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CCP0003,manda,MHI,,7,,,1,57.6,67.8,8.86,6.77,,,
CCP0004,manda,MHH,,8,,,1b,46.12,44.28,6.95,,,
CCP0005,manda,MHH,,5,,,1,34.43,77.46,8.84,,12.7
CCP0006,manda,MHH,,8,,,1b,59.09,87.87,7.66,,27
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```




CCP_database_for_ADS.csv
[DOWNLOAD] right-click and save link

PDF 372 kb

Data Repositories (DRs)



Crystallography Open Database

Open-access collection of crystal structures of organic, inorganic, metal-organic compounds and minerals, excluding [biopolymers](#)

All data on this site have been placed in the public domain by the contributors.

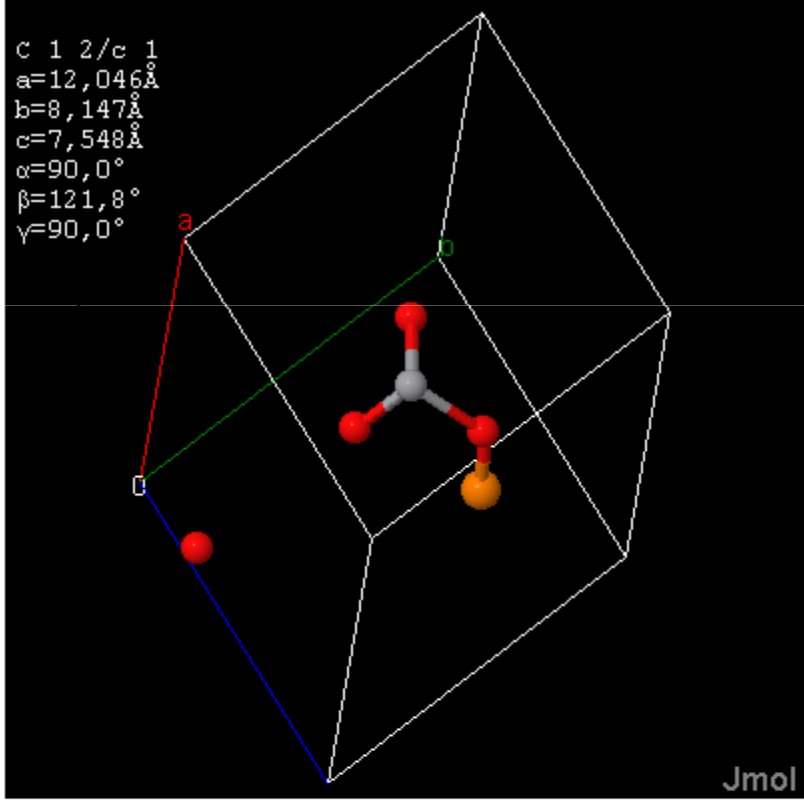
COD Advisory Board thanks [The Research Council of Lithuania](#) for their financial support of the public [Crystallography Open Database \(COD\)](#): an open-access collection of crystal structures and platform for its

Structure parameters		
Chemical name	Oxovanadium bis(dihydrogenphosphite)	
Formula	-H6 O6 P2 V -	
Calculated formula	-H3 O6 P2 V -	
Title of publication	Ab initio crystal structure determination of vanadium(IV) hypophosphite	
Authors of publication	Le Bail, A; Marcos, M D; Amoros, P	
Journal of publication	Inorganic Chemistry	
Year of publication	1994	
Journal volume	33	
Pages of publication	2607 - 2613	
a	12.046 ± 0.003 Å	
b	8.147 ± 0.001 Å	
c	7.548 ± 0.002 Å	
α	90°	
β	121.83 ± 0.02°	
γ	90°	
Cell volume	629.4 Å ³	
Number of distinct elements	4	
Bermann-Mauguin symmetry space group	C 1 2/c 1	
Residual factor for all reflections	0.032	
Has coordinates	Yes	

Preview

```

C 1 2/c 1
a=12,046Å
b=8,147Å
c=7,548Å
α=90,0°
β=121,8°
γ=90,0°
          
```




Coordinates
[1000118.cif](#)



The CHAIN-REDS Semantic Search Engine

Co-ordination & Harmonisation of Advanced e-Infrastructures for Research and Education Data Sharing



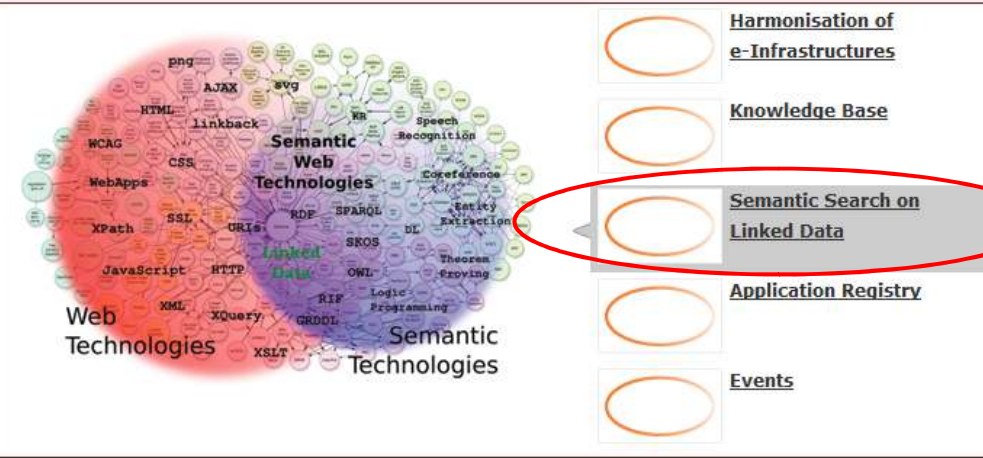
Home Project Knowledge Base Semantic Search Applications Science Gateway Events News Old Project

CHAIN-REDS is a FP7 project co-funded by the European Commission (DG CONNECT) aiming at promoting and supporting technological and scientific collaboration across different e-Infrastructures established and operated in various continents, in order to define a path towards a global e-Infrastructure ecosystem that will allow Virtual Research Communities (VRCs), research groups and even single researchers to access and efficiently use worldwide distributed resources (i.e., computing, storage, data, services, tools, applications).

Registrations are now open for the CHAIN-REDS Project workshop on "e-Infrastructures for e-Sciences" focusing on Cloud Computing and Data Repositories in Beijing, P.R. of China on October 22, 2013! The workshop is organised under the aegis of the European Commission and in co-location with the International Conference on e-Science (IEEE2013) 2013 that will be held in Beijing, P.R. of China on October 17-22, 2013 [...].

News

CHAIN REDS at the EU LAC ICT and eInfrastructures Conference





- ▶ Aims to develop an open access, participatory infrastructure for linking scientists and scientific data/information resources
- ▶ The approach is based on two fundamental pillars:
 - ▶ Interconnection and integration of scientific resources through semantically enriched metadata
 - ▶ Social network of scientists as well as non-experts (the «citizen scientist»)

KLIOS: Knowledge Linking and sharing in research dOmainS - <http://klios.ct.infn.it>

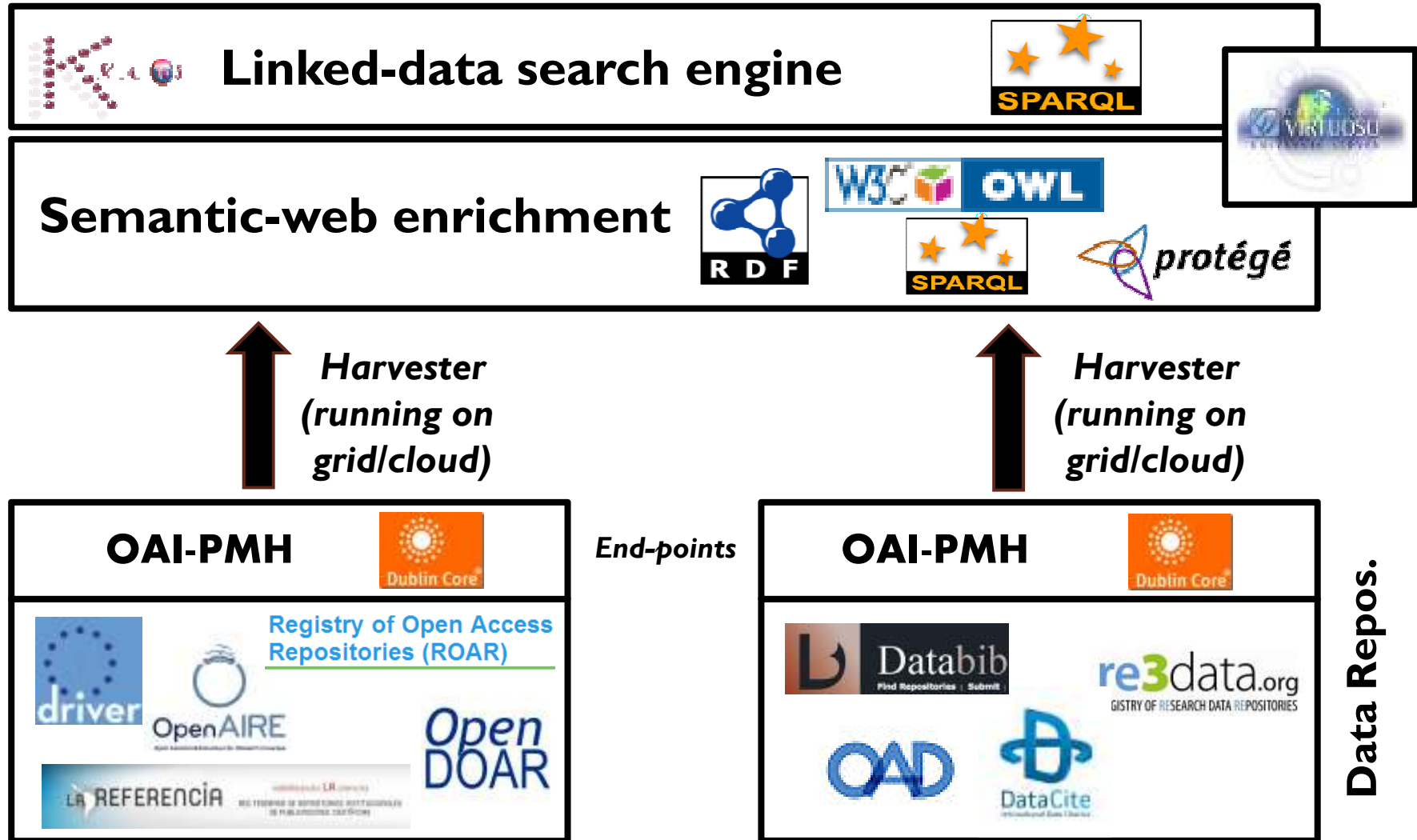


Multi-layered architecture

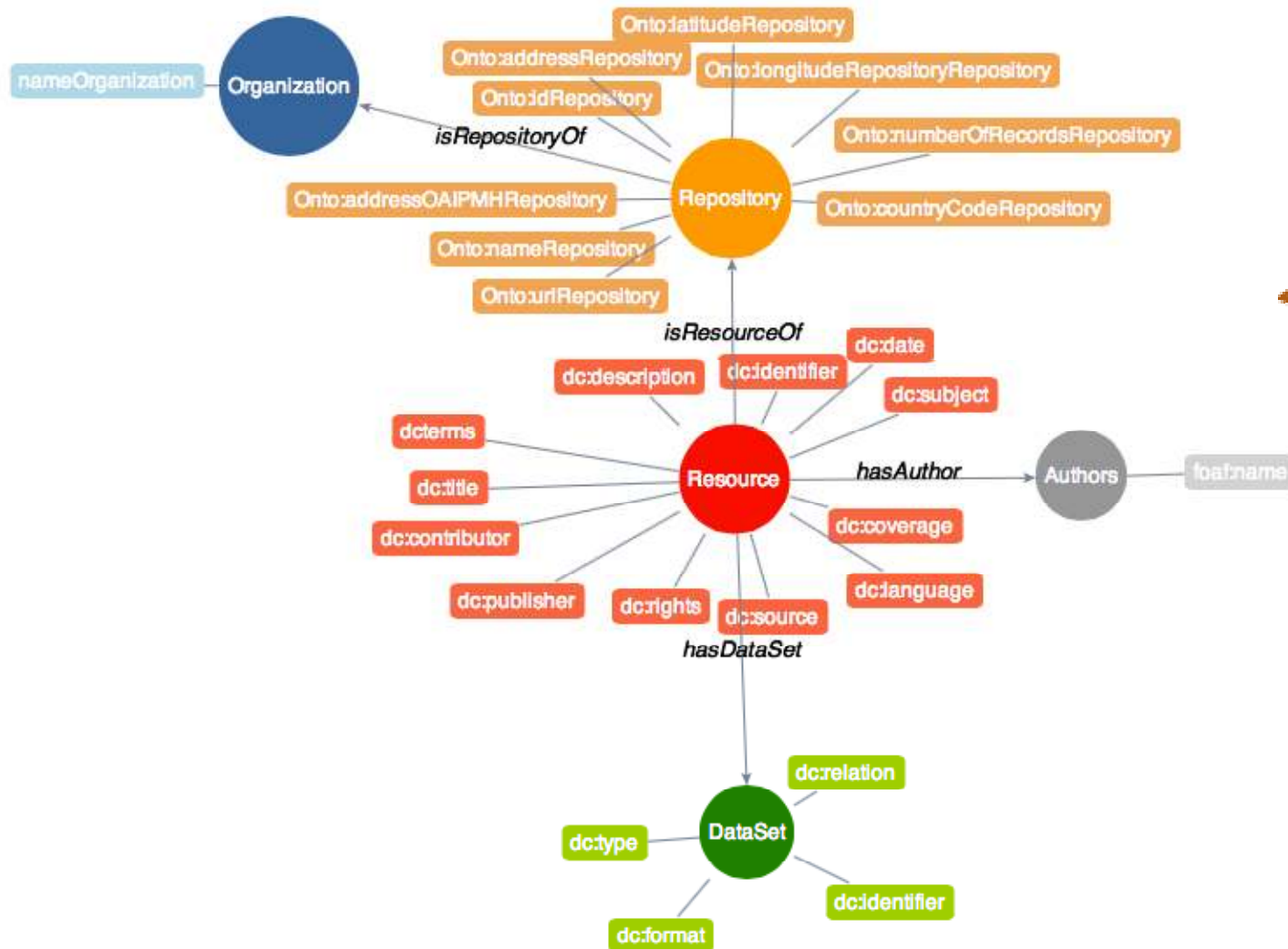
- ▶ Linked data semantic search
- ▶ Semantic enrichment
- ▶ Metadata harvesting



Multi-layered architecture



Semantic enrichment





Linked data semantic search

(www.chain-project.eu/semantic-search)

Co-ordination & Harmonisation of Advanced e-Infrastructures
for Research and Education Data Sharing



Home Project Knowledge Base **Semantic Search** Applications Science Gateway Project

Semantic Search on Linked Data

Here you can search across the thousands of [Open Access Document Repositories](#) and [Data Repositories](#) included in the CHAIN Knowledge Base. Some exemplar keywords are: cardiology, cornea, geology, linked data, natural gas.

Select a language: All

Submit Query

More than 22 million resources, almost 600 million triples

Semantic Search on Linked Data

Here you can search across the thousands of semantically enriched [Open Access Document Repositories](#) and [Data Repositories](#) included in the CHAIN Knowledge Base. Some exemplar keywords are: cardiology, cornea, geology, linked data, natural gas.

Select a language: All



ALL

Bashkir	Danish	German	Italian	Russian
Basque	Dutch	Greek	Japanese	Serbo-Croatian
Catalan	English	Hungarian	Latin	Slovenian
Chinese	Finnish	Indonesian	Norwegian	Spanish
Czech	French	Irish	Portuguese	Swedish

Submit Query

UbuntuNet Con


Linked data semantic search

(www.chain-project.eu/semantic-search)

Semantic Search on Linked Data

Here you can search across the thousands of semantically enriched [Open Access Document Repositories](#) and [Data Repositories](#) included in the [CHAIN Knowledge Base](#). Some exemplar keywords are: cardiology, cornea, geology, linked data, natural gas.

Select a language: English



Enter a keyword or select a language and then choose a subject

- English Subjects**
- [\(0,1\)-matrices](#) (3)
 - [\(n, r\)-arcs](#) (1)
 - [\(n, v\)-groupoid](#) (1)
 - [020.715](#) (1)
 - [023](#) (1)
 - [025.173 43](#) (1)
 - [025.23](#) (1)
 - [025.5](#) (1)
 - [027.4](#) (1)
 - [028.7](#) (1)
 - [03b42](#) (1)
 - [1st kind integral equations](#) (1)
 - [26a16](#) (1)
 - [26a24](#) (1)
 - [26a33](#) (43)
 - [26d10](#) (2)
 - [26d15](#) (2)
 - [28a78](#) (1)
 - [2d electoral paradoxes](#) (1)
 - [2d proportional electoral systems](#) (1)

- [gauss and generalized hypergeometric functions](#) (1)
- [gauss hypergeometric differential equation](#) (1)
- [gauss hypergeometric function](#) (1)
- [gauss-lucas theorem](#) (1)
- [gaussian probability distribution](#) (1)
- [gauß numbers](#) (1)
- [gegenbauer's polynomial](#) (1)
- [gelfand pair](#) (1)
- [gelfand-shilov theorem](#) (1)
- [genealogy](#) (1)
- [general and applied linguistics](#) (1)
- [general information theory](#) (5)
- [general systems theory](#) (1)
- [generalised inverse](#) (1)
- [generalization](#) (1)
- [generalization of ehrenfest's urn model](#) (1)
- [generalization problem](#) (1)
- [generalized abel equation](#) (1)
- [generalized basic hypergeometric functions](#) (1)



Linked data (www.chain-p)

(1)The public sphere according to UK stem cell scientists

(2)The public sphere according to UK stem cell scientists

Semantic Search on Linked Data

Here you can search across more than 20 million resources contained in the thousands of semantically enriched [Open Data Repositories](#) included in the [CHAIN Knowledge Base](#). Some exemplar keywords are: cardiology, cell, cornea, ge

Select a language: All ▾



cell

Enter a keyword or select a language and then choose a subject

Results Graphs

Records found. Displaying 1 to 20

Title

The public sphere according to UK stem cell scientists

Author

Kolka Alexandra

Description

In this thesis the concept of social representations is made relevant to the study of the 'public sphere' according to a re-examination of the notion of a 'consensual' and a 'reified universe' substantiating a more sociopsychological app

Repository

LSE Theses Online

[More Info](#)

General information

Authors: Kolka Alexandra

Date stamp: 2012-07-02T13:29:59Z

Description (1) : In this thesis the concept of social representations is made relevant to the study of the 'public sphere' according to scientists. This is elaborated by the re-examination of the notion of a 'consensual' and a 'reified universe' substantiating a more sociopsychological approach in the study of relevant phenomena. Two processes generate social representations of the public: anchoring and objectification. The empirical study investigates the scientists' views of the public sphere, in relation to public perceptions, media coverage and the regulation of cloning technology. Elite media coverage of the stem cell debate and conversations with stem cell scientists are systematically analysed with multiple methods. Findings are based on 451 news articles that appeared in Nature and Science between 1997 and 2005 and on interviews with 18 U.K based stem cell researchers conducted between February and October 2005. The analysis compares the debate before and after the 'stem cell war' of 2002, and typifies a high tension in representing the public sphere, elaborated in metaphors and prevailing arguments. Central elements of the representation assume a strong disassociation of science from the public sphere; peripheral elements operate with a degree of blurring of those same boundaries, which recognises a common project. This representation, while being expressive of its context of production, constitutes a functional response to it.

Description (2) : In this thesis the concept of social representations is made relevant to the study of the 'public sphere' according to scientists. This is elaborated by the re-examination of the notion of a 'consensual' and a 'reified universe' substantiating a more sociopsychological approach in the study of relevant phenomena. Two processes generate social representations of the public: anchoring and objectification. The empirical study investigates the scientists' views of the public sphere, in relation to public perceptions, media coverage and the regulation of cloning technology. Elite media coverage of the stem cell debate and conversations with stem cell scientists are systematically analysed with multiple methods. Findings are based on 451 news articles that appeared in Nature and Science between 1997 and 2005 and on interviews with 18 U.K based stem cell researchers conducted between February and October 2005. The analysis compares the debate before and after the 'stem cell war' of 2002, and typifies a high tension in representing the public sphere, elaborated in metaphors and prevailing arguments. Central elements of the representation assume a strong disassociation of science from the public sphere; peripheral elements operate with a degree of blurring of those same boundaries, which recognises a common project. This representation, while being expressive of its context of production, constitutes a functional response to it.

Identifier (1) : Kolka, Alexandra (2012) The public sphere according to UK stem cell scientists. PhD thesis, The London School of Economics and Political Science.

Identifier (2) : http://etheses.lse.ac.uk/391/1/Kolka_The%20public%20sphere%20according%20to%20UK%20stem%20cell%20scientists.pdf

Subject (1) : HM Sociology

Subject (2) : HM Sociology

Language : en

Date : 2012-06

Dataset information

Identifier : http://etheses.lse.ac.uk/391/1/Kolka_The%20public%20sphere%20according%20to%20UK%20stem%20cell%20scientists.pdf

Type (1) : Thesis

Type (2) : NonPeerReviewed

Format : application/pdf

Location : <http://etheses.lse.ac.uk/391/>

Repository information

Name : LSE Theses Online

URL : <http://etheses.lse.ac.uk/>

OAI-PMH address : <http://etheses.lse.ac.uk/cgi/oa12>

Country Code : GB

Address :

Longitude : -0.117

Latitude : 51.514

Domain : Multidisciplinary

Project : OpenDOAR

Organization : London School of Economics & Political Science



Linked data

(www.cha)

(Table 3) Stable nitrogen and carbon isotope ratios, and mercury content in teeth of polar bears (*Ursus maritimus*)

General Information

Authors : Sonne Christian ; Wiig Øystein ; Dietz Rune ; Aubail Aurore ; Rigét FrankF ; Caurant Florence
Date Stamp : 2013-04-04T05:33:13Z
Publisher : PANGAEA - Data Publisher for Earth & Environmental Science
Identifier : doi:10.1594/PANGAEA.807119
Subject (1) : Mercury
Subject (2) : delta 13C
Subject (3) : isotope ratio mass spectrometry
Subject (4) : Sample amount
Subject (6) : delta 13C, standard deviation
Subject (8) : delta 15N
Subject (7) : Sampling date
Subject (8) : delta 15N, standard deviation
Subject (9) : Mercury, standard deviation
Subject (10) : Advanced Mercury Analyser AMA-254, LECO
Language : eng
Date : 2012
Rights : Creative Commons Attribution 3.0 Unported (CC-BY)

Dataset Information

Identifier DOI : [10.1594/PANGAEA.807119](https://doi.org/10.1594/PANGAEA.807119)
Type : Dataset
Format (1) : text/tab-separated-values
Format (2) : 17 data points
Relation DOI : [10.1594/PANGAEA.807120](https://doi.org/10.1594/PANGAEA.807120)
Relation DOI : [10.1039/c1em10681c](https://doi.org/10.1039/c1em10681c)

Repository Information

Name : DataCite/Databib (DataCite)
URL : <http://www.datacite.org>
OAI-PMH address : <http://oai.datacite.org/oai>
Country Code : 0
Address :
Longitude : 0.0
Latitude : 0.0
Domain : Multidisciplinary
Project : DataCite
Organization : Australian National Data Service, Canada Institute for Scientific and Technical Information, Beijing Genomics Institute - BGI, Technical Information Center of Denmark, Institute for Scientific and Technical Information - INIST, German National Library of S

Optimization of microsatellite genotyping and genetic sexing of non-invasively collected Polar Bear (*Ursus*)

Author
Harris ChristopherMatthew

Description
NSERC

Repository
[QSpace at Queen's University](#)
[More Info](#)

Title
(Table 3) Stable nitrogen and carbon isotope ratios, and mercury content in teeth of polar bears (*Ursus m*)

Author
Sonne Christian; Wiig Øystein; Dietz Rune; Aubail Aurore; Rigét FrankF; Caurant Florence

Repository
[Publishing Network for Geoscientific and Environmental Data](#)
[More Info](#)

Title
(Table 3) Stable nitrogen and carbon isotope ratios, and mercury content in teeth of polar bears (*Ursus m*)

Author
Sonne Christian; Wiig Øystein; Dietz Rune; Aubail Aurore; Rigét FrankF; Caurant Florence

Repository
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Records found. Displaying 1 to 20

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Linked data semantic search

(www.chain-project.eu/linked-data)

Results
Graphs

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[R3] The metastasis-associated extracellular matrix protein Osteopontin forms transient structure in ligand interaction sites

[R4] Analysis of antigenically important residues in human influenza A virus in terms of B-cell epitopes

6 Resources Selected

Select a Filter for visualization:

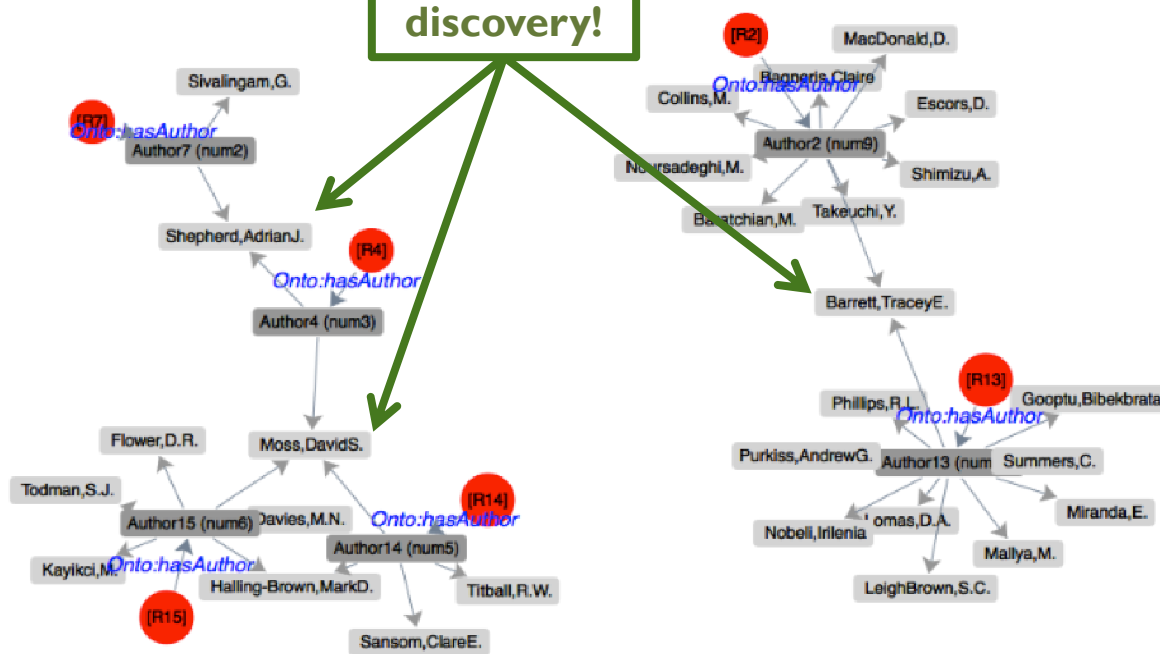
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Results
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 [R18] Opsin stability and folding: modulation by Phospholipid Bicelles
 [R19] The effects of intracellular signalling pathway inhibitors on phagocytosis by haemocytes of *Manduca sexta*
 [R20] Role of human tear fluid in *Acanthamoeba* interactions with the human corneal epithelial cells

9 Resources Selected

Select a Filter for visualization:

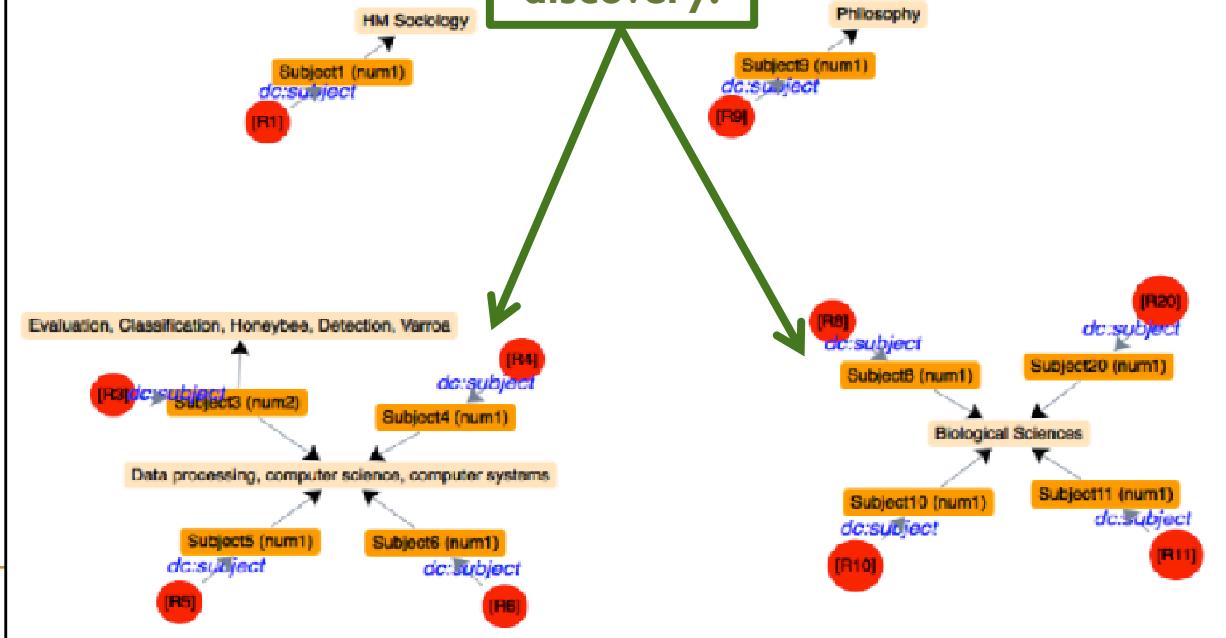
Subjects
 Authors
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 [R19] The effects of intracellular signalling pathway inhibitors on phagocytosis by haemocytes of *Manduca sexta*
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9 Resources Selected

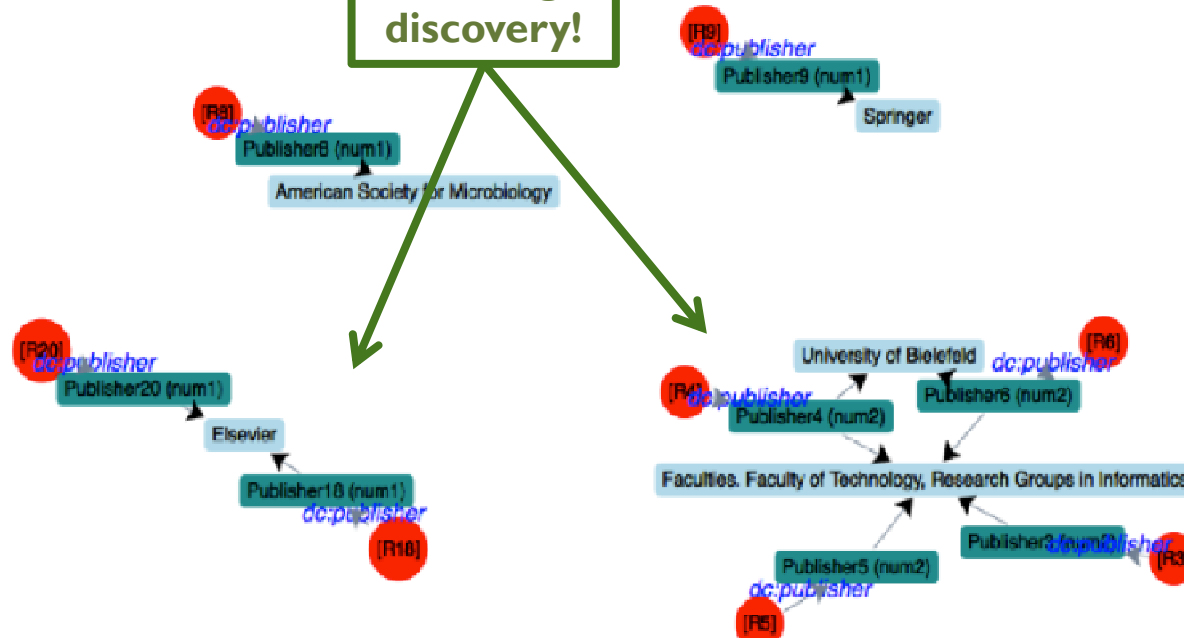
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Summary and conclusions

- ▶ Data Infrastructures are becoming an essential component of e-Infrastructures
- ▶ Next years' biggest challenge will be to uniquely correlate scientific papers with data used to write them with applications used to analyse them so to be able to go across the knowledge path both ways
- ▶ Semantic-web and linked-data technologies can play a major role in this context and CHAIN-REDS aims to promote these standards in the targeted regions
- ▶ OADR's and DR's managers/owners are welcome to contact the project to share their data within the CHAIN Knowledge Base (both in Africa and Latin America this is already happening)
- ▶ CHAIN-REDS is also looking forward to receiving feedbacks from all interested organisations on the Knowledge Base and the Semantic Search service

***Co-ordination & Harmonisation of Advanced e-Infrastructures
for Research and Education Data Sharing***

Questions ?

roberto.barbera@ct.infn.it – rafael.mayo@ciemat.es

Research Infrastructures – Proposal n. 306819



www.chain-project.eu
proj-office@chain-project.eu

