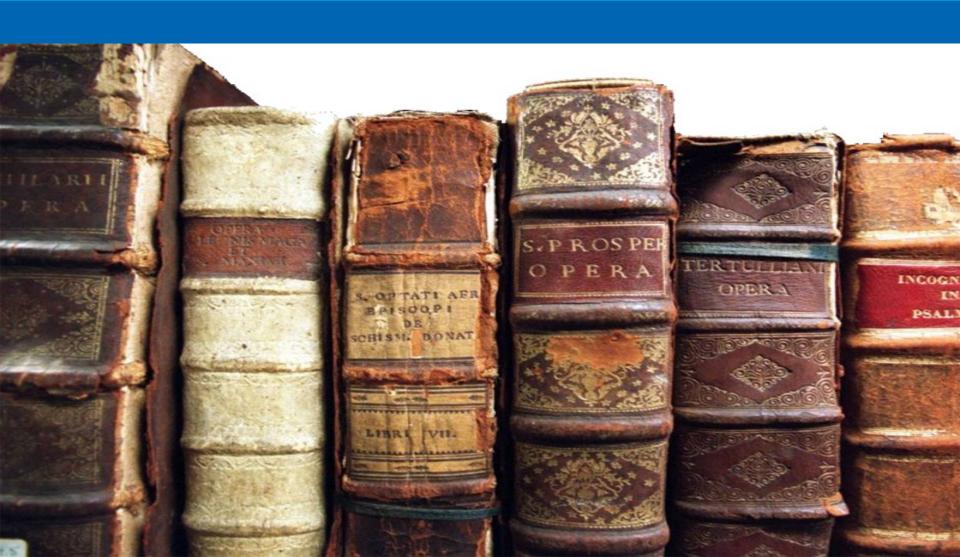
## Invenio vs Dspace





### Collection



### Invenio: Collection

- Metadata are organized into collections
- Collection tree
  - For navigation by users
- Can have regular and virtual child

Multimedia	
Narrow by collection	Focus on
[] Videos	BBC Pictures and Videos

### **Dspace: Collection**

#### Communities

Select a community to browse its collections.

Abdul Latif Jameel Poverty Action Lab (J-PAL)

**Air Transportation Research** 

**Biological Engineering Division** 

Center for Energy and Environmental Policy Research

Center for Global Change Science

Center for Innovation in Product Development (CIPD)

Center for International Studies (CIS)

Center for Reflective Community Practice (CRCP)

Center for Technology, Policy, and Industrial Development (CTPID)

**Comparative Media Studies** 

Computer Science and Artificial Intelligence Lab (CSAIL)

**Department of Aeronautics and Astronautics** 

**Department of Architecture** 

Department of Biology

Department of Brain and Cognitive Sciences

**Department of Chemical Engineering** 

Department of Chemistry

Department of Civil and Environmental Engineering

Department of Earth, Atmospheric, and Planetary Sciences

Department of Economics

Department of Electrical Engineering and Computer Sciences

Departn	ient of	Biology
---------	---------	---------

Search within this community and its collections:

Go

Advanced Search

Sub-communities within this community

Theses - Biology

#### Theses - Biology

Search within this community and its collections:

Go

Advanced Search

#### Collections in this community

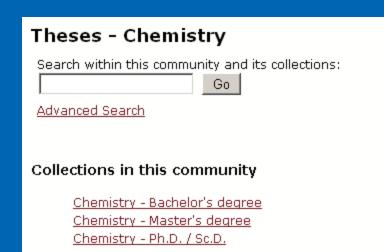
<u>Biology - Bachelor's degree</u> Biology - Master's degree

Biology - Ph.D. / Sc.D.

### **Dspace: Collection**

- No need of customization
- Just keep on adding subcollections
- Creates redundancies

# Theses - Biology Search within this community and its collections: Go Advanced Search Collections in this community Biology - Bachelor's degree Biology - Master's degree Biology - Ph.D. / Sc.D.



### Invenio: Collection

- A bit challenging to setup
- Use query to create linkages to setup virtual collection

### Invenio: Collection

Easy to navigate

#### **Main Collection**

Narrow by collection

Focus on

- Books ()
- •Thesis()
- •Reports ()
- Proceedings ()

- Technology()
- Biodiversity()
- •.....

### **Dspace: Collection**

May create confusion

```
Main Collection
```

```
collection
```

```
Books ()
Technology()
Biodiversity()
Thesis ()
Technology ()
Biodiversity()
Reports ()
Technology ()
Biodiversity()
```

# Volume in developing institutions



### Invenio: Volume

#### **CERN Document Server**

Over 900,000 bibliographic records, including 360,000 fulltext documents, of interest to people working in particle physics and related areas. Covers preprints, articles, books, journals, photographs, and much more.

Search 1,027,883 records for:			
	any field	Search	Browse

Search Tips :: Advanced Search

Check out photos and videos of the LHC First Physics.

#### Narrow by collection:

Articles & Preprints (890,211)

Published Articles (316,182) Preprints (516,377) Theses (16,718) Reports (5,568) CERN Internal Notes (15,278) Committee Documents (22,407)

Books & Proceedings (71,682)

Books (46,364) Proceedings (16,870) Standards (8,452)

Presentations & Talks (16,991)

Conference Announcements (14,992) Academic Training Lectures (608) Summer Student Lectures (617) General Talks (767) Videotapes (293)

Periodicals & Progress Reports (2,816)

Periodicals (2,211) Progress Reports (606)

Multimedia & Outreach (51,104)

Photos (13,596) Videos (1,089) Press (31,541) Audio Archives (436) Exhibition
Objects (179) Brochures (119) Posters (486) HEP Institutes (2,069) Experiments
at CERN (933) Internet Resources (656)

#### Focus on:

CERN Articles & Preprints (94,963)

CERN Published Articles (51,998) CERN Preprints (16,304) CERN Theses (3,258) CERI

**CERN Series** (15,471)

CERN Annual Reports (2) CERN Yellow Reports (1,131) CERN Theory (12,508) Acader General Talks (767)

CERN Departments (76,013)

Accelerator Technology (AT) (5,181) Accelerators & Technology Sector (19,117) Beams

Finance (FI) (1,133) Human Resources (HR) (170) Information Technology (IT) (4,291) P

Technical Support (TS) (1,385) Technology Department (TE) (88)

CERN Experiments (21,647)

Fixed Target Experiments (34) LEP Experiments (5,547) LHC Experiments (15,528) Re

CERN R&D Projects (904)

CERN Accelerator R&D Projects (904)

Archives (55,362)

CERN Archives (50,861) Pauli Archives (3,788) DSU Archives (713)

# Invenio: Volume (collections, records)

- 500 + collections
- 1 million records

### Dspace: volume of resources

A "go to market" strategy: enabling P&G profitable share growth through streamlined logistics

The "green" challenge to the industrial enterprise mindset: survival threat or strategic opportunity?

Koenigs, Leslie E. (Leslie Erin), 1973- (Massachusetts Institute of Technology, 2002)

Mylonadis, Yiorgos (Massachusetts Institute of Technology, 1994)

#### **Browsing by Title**

Or enter first few letters: Go	
ort by: title   ▼ Order: ascending ▼ Results: 20 ▼ Update	
Now showing items 1-20 of 38912	<u>Next Page</u>
"Datum for its own annihilation" : feedback, control, and computing, 1916-1945 Mindell, David A. (David Avram) ( <i>Massachusetts Institute of Technology</i> , 1996)	
"Decision support systems: the design process"  Scott Morton, Michael S. ([Cambridge, M.I.T.], 1973)	
The "factory" approach to large-scale software development : implications for strategy, technology, and structure  Cusumano, Michael A. (Cambridge, Mass. : Sloan School of Management, Massachusetts Institute of Technology, 1987)	
The "factory" approach to large-scale software development : implications for strategy, technology, and structure  Cusumano, Michael A. (Cambridge, Mass. : Sloan School of Management, Massachusetts Institute of Technology, 1987)	
<mark>"For good design, you pay now; for bad design, you pay later"or do you?</mark> Murugappan, Meena; O'Young, S. Michael ( <i>Massachusetts Institute of Technolog</i> y, 2006)	
"Generational" innovation : the reconfiguration of existing systems and the failure of established firms  Henderson, Rebecca.; Clark, Kim B. (Cambridge, Mass. : Alfred P. Sloan School of Management, Massachusetts Institute of Technology, 1989)	

 $\underline{0-9}\ \underline{A}\ \underline{B}\ \underline{C}\ \underline{D}\ \underline{E}\ \underline{F}\ \underline{G}\ \underline{H}\ \underline{I}\ \underline{J}\ \underline{K}\ \underline{L}\ \underline{M}\ \underline{N}\ \underline{O}\ \underline{P}\ \underline{Q}\ \underline{R}\ \underline{S}\ \underline{I}\ \underline{U}\ \underline{V}\ \underline{W}\ \underline{X}\ \underline{Y}\ \underline{Z}$ 

### Dspace: volume of resources

- 38912 records
- Redundant sub-collections

#### Center for Reflective Community Practice (CRCP)

**CRCP Working Papers Collection** 

Race & Democracy Reflection Project

Organization Collections

#### Asian Pacific American Legal Center (APALC)

<u>Personal Interviews</u>

Presentations of the Work

Reflection Transcript

Selected Stories

#### Beloved Community Center (BCC)

Personal Interviews

Presentations of the Work

Reflection Transcript

Selected Stories

#### Conservation Law Foundation Greater Boston Institute (CLF)

Personal Interviews

Presentations of the Work

Reflection Transcript

Selected Stories

#### Southern Echo

Personal Interviews

<u>Presentations of the Work</u>

Reflection Transcript

Selected Stories

#### Texas LEADS: Local Empowerment for Accessible and Diverse Schools

Personal Interviews

### Platform



### Platform: Invenio

- Language: Python
- Database: MySql
- Server: apache with mod\_python (latest stable release)
- Dependencies: easily available python modules
- Server: apache with mod\_wsgi (next release)

### Platform: Dspace

- Language: Java
- Apache-ant
- Database: PostgreSQL
- Server: Tomcat

### Metadata Standards

- Invenio: MARC
- Dspace: Dublin Core

### Restriction of Resources



### Invenio: Restriction

- Module: Webaccess
  - Firewall like Roles

allow not email /.\*@gmail.com/deny group badguys allow remote\_ip "127.0.0.0/24" deny all

### Invenio: Restriction

step 1 - give values to the reques	ted fields and confirm to modify role
role name	thesesviewer
description	Theses viewer
firewall like role definition [?]	allow group "Theses viewers" allow apache_group "theses"

### **Dspace: Restriction**

Restriction by IP possible

```
dspace.cfg
# ip-addresses of your network
authentication.ip.addresses=123.4.5.,123.4.6.
# implicit group ID for users with such ip-addresses
authentication.ip.group=31
```

### Community



### Invenio: Community

- Less compared to Dspace but growing
- Mostly in Europe
  - the adopter community is growing, as is the developer community
- NASA (ADS) is investigating for serving ~7000,000 records
- Joint project between CERN and other organizations to serve high energy physics literature [inspirebeta.cern.ch]

### **Dspace: Community**

Over 700 organizations

### Search Engine



### Invenio: Search Engine

- Powerful search engine
- Provides google like search speeds for repositories of a few million records
- External servers collection search

### Invenio: Search Engine

- Complex boolean operators
- Regular expressions search
- If no direct match found, proposes alternative matches

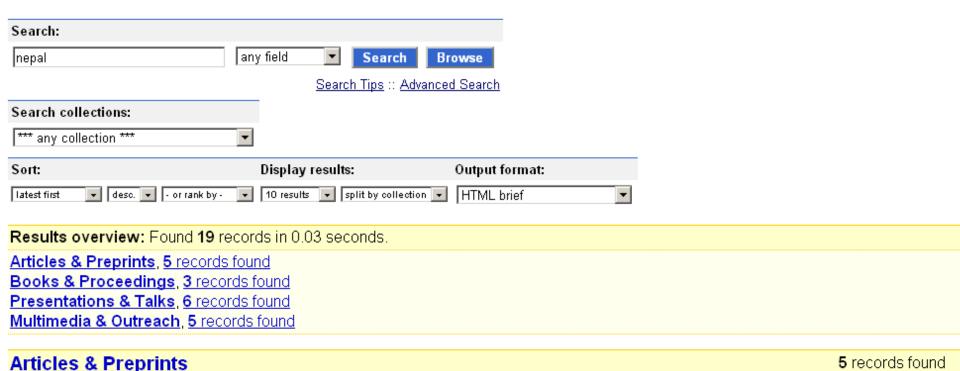
### Dspace: Search Engine

- Lucene (java)
- High performance engine

Search Results

### Invenio: Search Results

### Intelligible results



□ 1. Cluster Development and Knowledge Exchange in Supply Chain / <u>Sureephong, Pradorn</u> (LIESP, CAMT); <u>Chakpitak, Nopasit</u> (LIESP)

Industry cluster and supply chain are in focus of every countries which rely on knowledge-based economy. Both focus on improving the competitiveness of firm arXiv:0806.0519.- 2008 Preprint - Published in : The Proceeding of International conference on Software Knowledge Information Managen (2008)

Detailed record - Similar records

### Invenio: Search Results

Options to search other predefined servers



Haven't found what you were looking for? Try your search on other servers: nepal in Amazon nepal in IHS nepal in CERN EDMS nepal in INSPEC nepal in CERN Indico nepal in ISO nepal in CERN Intranet nepal in KISS Books/Journals nepal in CiteSeer nepal in KISS Preprints nepal in Google Books nepal in NEBIS nepal in SLAC Library Catalog nepal in Google Scholar nepal in SPIRES HEP nepal in Google Web nepal in IEC nepal in Scirus

### Dspace: Search Results

Very simple

Search	
Search Scope:	All of DSpace@MIT ▼
Full Text Search:	nepal
Results/page 10 🔻	Sort items by relevance
Go	
Your query "nepal" pro	duced 153 result(s).
Search Results	
	Now showing items 1-10 of 153 <u>1</u> <u>2</u> <u>3</u> <u>4</u> <u>16</u>
	<u>n study of drinking water in Nepal</u> Patricia Marie), 1974- ( <i>Massachusetts Institute of Technolog</i> y, 2000)
	orination for the developing world : a cast study in Lumbini, Nepal (Hannah Bahnsen), 1979- ( <i>Massachusetts Institute of Technolog</i> y, 2002)
	r <mark>amic water filter for Nepal</mark> bert William), 1976- ( <i>Massachusetts Institute of Technolog</i> y, 2003)
	<u>n of the central Himalya, Marsyandi Valley, Nepal</u> E. (Margaret Emily) ( <i>Massachusetts Institute of Technolog</i> y, 1996)
	n <mark>ology in Kathmandu, Nepal : a closer look at development</mark> 1973- ( <i>Massachusetts Institute of Technology</i> , 2002)
	PAr/39Ar geochronology, and structure of the Main Central Thrust zone and Tibetan Slab, eastern Nepal lonia (Massachusetts Institute of Technology, 1988)
	reatment for arsenic removal through iron oxide coated sand : application for the Terai region of Nepal rika Renee), 1979- (Massachusetts Institute of Technology, 2002)

### Invenio: Search Results

Recommendation by the search engine

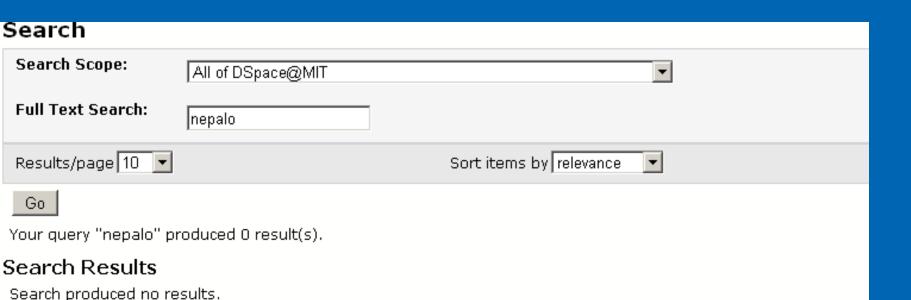
**CERN Document Server** Search: nepalo any field Search **Browse** Search Tips :: Advanced Search Search collections: \*\*\* any collection \*\*\* Display results: **Output format:** Sort: 10 results 🔻 split by collection 🔻 ▼ desc. ▼ - or rank by latest first HTML brief Search term nepalo did not match any record. Nearest terms in any collection are: nep@icmp nep@icmp.lviv.ua nepa nepal nepali nepalo nepcon Haven't found what you were looking for? Try your sear nepd nepalo in Amazon nepalo in IHS nepean nepalo in CERN EDMS nepalo in INSPEC nepean-carleton nepalo in CERN Indico nepalo in ISO nepeipivo

nonale in CEDN Intranct

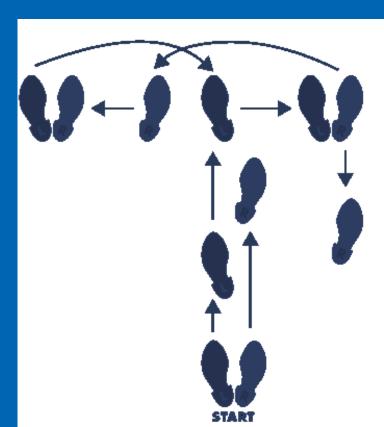
nonale in MSS Book

### **Dspace: Search Results**

No results



### Workflow



### Invenio: Workflow

- Module: Websubmit
  - Flexible
  - Highly customizable

### **Dspace: Workflow**

- 3 different types of workflows
- Create, modify or remove workflow step from the collection

# **UI** Customization



### Invenio: UI Customization

- Module: bibformat
  - Template for a record
  - Different output format for different collection
- Module: Webstyle
  - Look and feel of system

### Invenio: UI Customization





👗 guest:: login

Servei de Biblioteques

Sobre el DDD

Help

Català

English Español

Home



#### Narrow by collection:

- **▼ Course materials** (21,650)
  - Student guides (18) Teaching resources (6) Course programs (17,612) Exams (4,014)
- **▼** Books and collections (2,275)

Books (68) Doctoral theses (2,137) Radio scripts (21) UAB Libraries guides (49)

Research literature (1,796)

Working papers (717) Preprints (255) Studies (303) Dissertations (521)

Periodical publications (735)

Journals (56) Newsletters (23) Old art and culture journals (75) Clandestine politics press (114) EMAS statements (69) Annual reports (267) Sustainability reports (131)

✓ Articles (13,268)

Published articles (13,268)

✓ Meetings and congresses (25)

Papers and communications (25)

Graphic documents (3,196)

Posters (3,145) Pictures (51)

Multimedia (547)

Audio (105) UAB Libraries Exhibitions (270) Videos (172)

Personal archives (5,031)

Bernard Lesfarques (178) David Rosenthal (3) Ferran Sunyer i Balaquer (1,159) José Agustín Goytisolo (3,691)

#### Focus on:

#### UAB course materials (21,644)

Student guides (18) Course programs (17,612) Exams (4,014)

#### UAB Books and series (2.210)

UAB Books (25) UAB doctoral theses (2,136) UAB Libraries guides (49)

#### UAB research literature (1,796)

UAB working papers (717) UAB Preprints (255) UAB estudies (303) UAB dissertations (521)

#### UAB periodical publications (69)

UAB journals (40) UAB Newsletters (19) UAB Annual reports (10)

#### UAB articles and reports (11,491)

UAB published articles (11,491)

#### UAB meetings and congresses (25)

UAB papers and communications (25)

#### UAB graphic documents (50)

UAB Pictures (50)

#### UAB multimedia (379)

UAB videos (109) UAB Libraries Exhibitions (270)

### **Dspace: UI Customization**

- CSS can be changed
- Not sure whether collection (subcollection) can have its own template like in Invenio

# Periodicals Management



### Invenio: Periodical

 Hacked feature (not out of the box feature)

Periodicals	
Search 2,211 records for:	
any field ▼ S	earch Browse
<u>Search Tip</u>	ps :: Advanced Search
Focus on: Electronic Journals (1,768)  Go directly to a specific article of core journals: Journal: European physical journal, C  Vol.: Page: GoDirect	
Core journals:	
European physical journal, C	Nuclear physics, A
IEEE transactions on applied superconductivity IEEE transactions on magnetics	Nuclear physics, B Physical review letters
IEEE transactions on nuclear science	Physical review special topics: Accelerators and beams
Journal of high energy physics - JHEP	Physical review, D

# **Dspace: Periodicals**

Not present in MIT dspace

### Web 2.0



### Invenio: Web 2.0

- Review and comment option for documents
- Can setup personal collection of documents (basket)
- User defined automated email alerts
- Knowledge sharing within user groups
- Any query can be used as an RSS feed

# Dspace: Web 2.0

Subscriptions facility available

# Around the world



#### Invenio: Around the world

### Czech Republic - National Repository of Grey Literature research results

(http://nrgl.techlib.cz/images/Open\_source.pdf)

	CDS Invenio	DSpace	Eprints	Fedora	Greenstone
Content Management	10	8	8	5	9
Content Acquisition	10	9	10	8	9
Metadata	6	5	5	7	5
Search Support	8	6	5	4	7
User Management	8	6	8	4	5
Support of Reports	6	6	4	6	10
Sustainability, Data Protection	8	8	7	10	6
Interoperability	6	6	6	7	8
User Interface	8	8	7	5	7
Standards Compliance	9	9	9	9	10
Automation Tools	9	7	5	5	8
Support, Services	9	7	8	6	6
Total	97	85	82	76	90

### Invenio: Around the world

### Top 400 institutional repositories

WORLD RANK			POSITION COUNTRY SIZE VISIBILITY RICH FILES SCHOLAR					
1	Smithsonian/NASA Astrophysics Data System*		2	1	507	1		
2	Hal CNRS		8	3	3	3		
3	Institut National de Recherche en Informatique et en Automatique Archive Ouverte	***	17	4	19	8		
4		+	4	8	40	5		
5		•	3	6	44	84		
6	MIT Dspace		5	21	5	4		
7	University of Michigan Deep Blue		23	19	10	13		
8	Hyper Article en Ligne Sciences de l'Homme et de la Société		80	5	109	21		
9	Tufts University Perseus Digital Library		1	2	409	524		
10	University of Southampton: Department of Electronics and Computer Science	$\mathbb{X}$	2	http://r	eposito	ories.web		

# Thank you

