

Forschungszentrum Telekommunikation Wien  
[Telecommunications Research Center Vienna]

# Scientific literature search (information management) for PhD students

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# How to get the relevant infos ?

- Know all about it
- Ask your colleague
- Go to next libraries (OPAC, ALEPH)
- Online demand <http://aleph.tuwien.ac.at/>
- Search globally (google, altavista, lycos, etc.)
- Use information portals

# Where to find them ?

- Books
- Articles
- Journals
- Preprints
- Conference Proceedings

# Databases (commercial I facts)



- IEEE explore
  - <http://ieeexplore.ieee.org/>
- INSPEC IEE
  - for Physics, Electronics and Computing
- STN The Scientific and Technical Information Network
  - <http://www.stn-international.de/>
  - FIZ Karlsruhe
- SciFinder Scholar
  - CAS database chemistry

- Web of Science WoS ISI
  - Science Citation Index

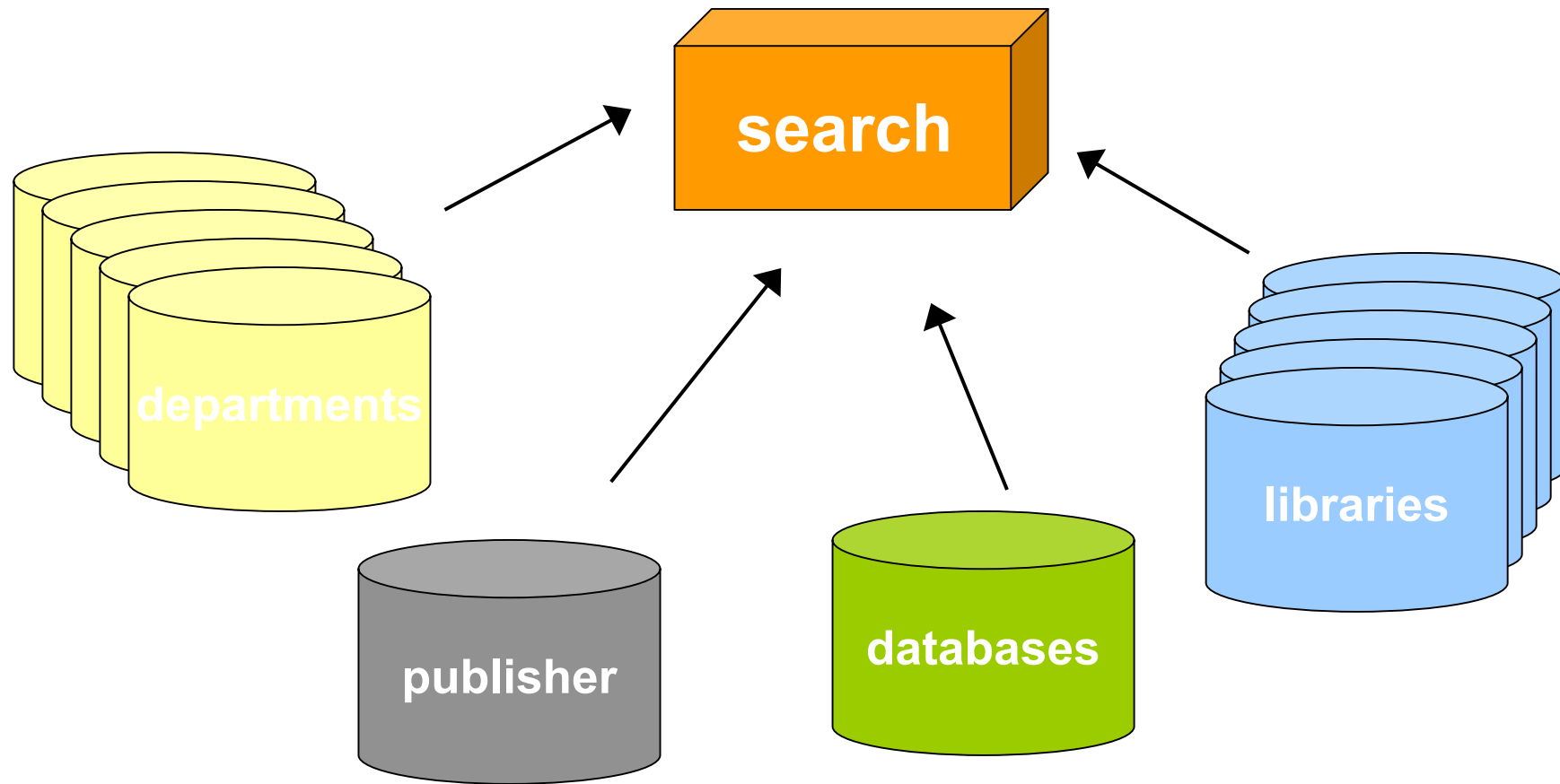
<http://www.isinet.com/isi/products/citation/sci/>

- CiteSeer
    - Computer Sciences
- <http://researchindex.org>

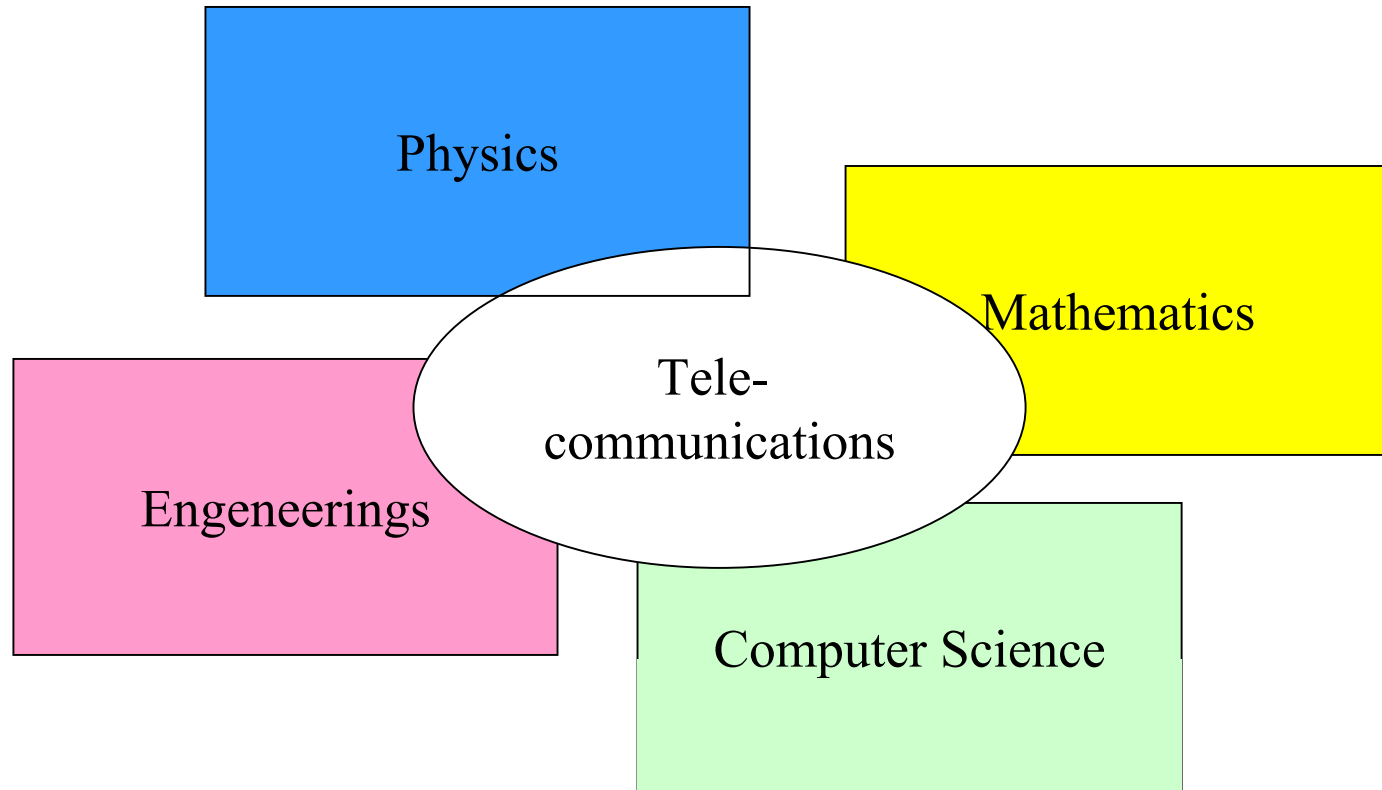
Try to get useful hints out of the online information mass !

Use online resources for free !

# Indexed servers



# Interference in Science





# Classification Schemes

- PACS                    01.20.+x,  
                              84.40.Az/Ba/Ua/Xb  
                              89.70.+c
  
- MSC                    94Axx,  
                              94Cxx
  
- AMC                    B.4,  
                              H.3
  
- IPC                    H 04
  
- DDC21                003.5(4)
  
- IEEE
  
- IEE



The screenshot shows a web browser window displaying the PhysNet website. The browser's address bar shows the URL <http://physnet.uni-oldenburg.de/PhysNet/>. The website features a navigation menu on the left with the following items: PhysNet (PhysNet Homepage), PhysDep (Physics Department), PhysDoc (Physics Documents), Journals (Physics-related Journals), Conferences (Physics-related Events), PhysJobs (Physics-related Jobs), Education (Resources in Physics), Links (Links to other Resources), Services (Author Tools & Services), and Uploadform (Register a new URL). The main content area includes the logo for Carl von Ossietzky Universität Oldenburg, Department of Physics, and the PhysNet logo with the tagline "The Physics Departments & Documents Network". A globe icon with "EPS" is also present. The text "Welcome to PhysNet the worldwide Physics Departments and Documents Network" is displayed. Below this is a world map with the URL <http://i.am/physnet>. A call to action asks users to help PhysNet by signing the PhysNet-Charter. Below this, it lists "Official Mirrors of PhysNet" and provides a link to select a mirror server. At the bottom, there are links for "About PhysNet", "The PhysNet-Crew", "How to contribute?", "Statistics", and "What's new?". A footer contains links for "PhysNet", "PhysDep", "PhysDoc", "Journals", "Conferences", "PhysJobs", "Education", "Physnet-Charter", "Uploadform", "Services", and "Links".

# Portal for Mathematics

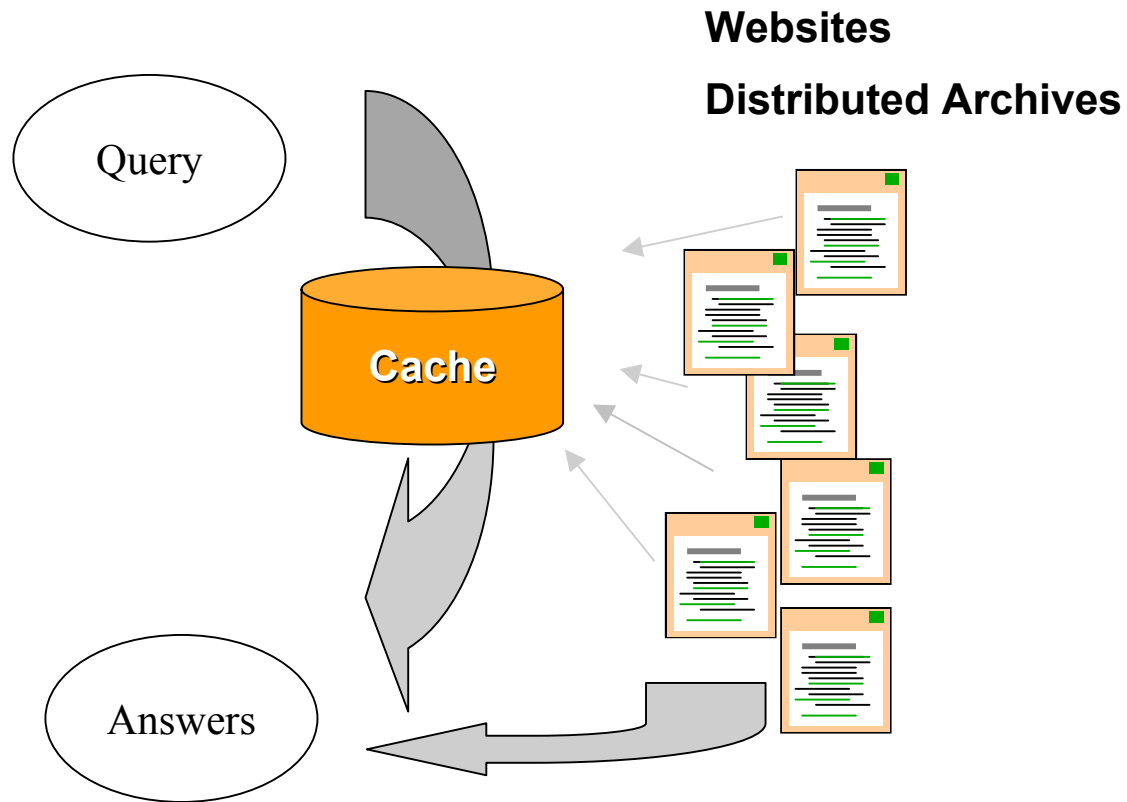


The screenshot shows a web browser window displaying the Math-Net website. The browser's address bar shows the URL <http://www.math-net.de/>. The website has a blue header with the Math-Net logo and the text "Internet Information Services for Mathematicians". Below the header is a yellow banner with the text "Math-Net Cluster". The main content area is divided into two columns of blue buttons, each with a corresponding text box describing a service:

- $\Sigma$** : Sigma. Searchable index for German mathematical resources, Fulltext, keyword and metadata based search, [hierarchical MSC index](#).
- Institutions**: Navigator find out more about MathNet members - by name, category or region.
- Preprints**: MPRESS. Searchable index of preprints from Austria, France, Germany, LAAS and more, [hierarchical MSC index](#).
- Links**: MathNet Links. Visit our collection of mathematical resources and related links.
- People**: PERSONA MATHEMATICA. Helps you find personal homepages or addresses of German mathematicians.
- Info**: Project Information. Information about MathNet, Math-Net [Newsletter](#) and [Archive](#).
- Software**: Netlib Search. Searchable Index of the [Yarkit](#), a repository of mathematical software, data and documents.
- Contact**: Contact address. If you need further information or help with this server.

At the bottom of the page, it says "Last Update: Dec 2001" on the left and "Responsible: W. Sponholz & W. Engel" on the right.

# Structure behind



Die richtige Information  
zum richtigen Zeitpunkt  
in der richtigen Menge  
am richtigen Ort  
in der erforderlichen Qualität  
zur Verfügung stellen.

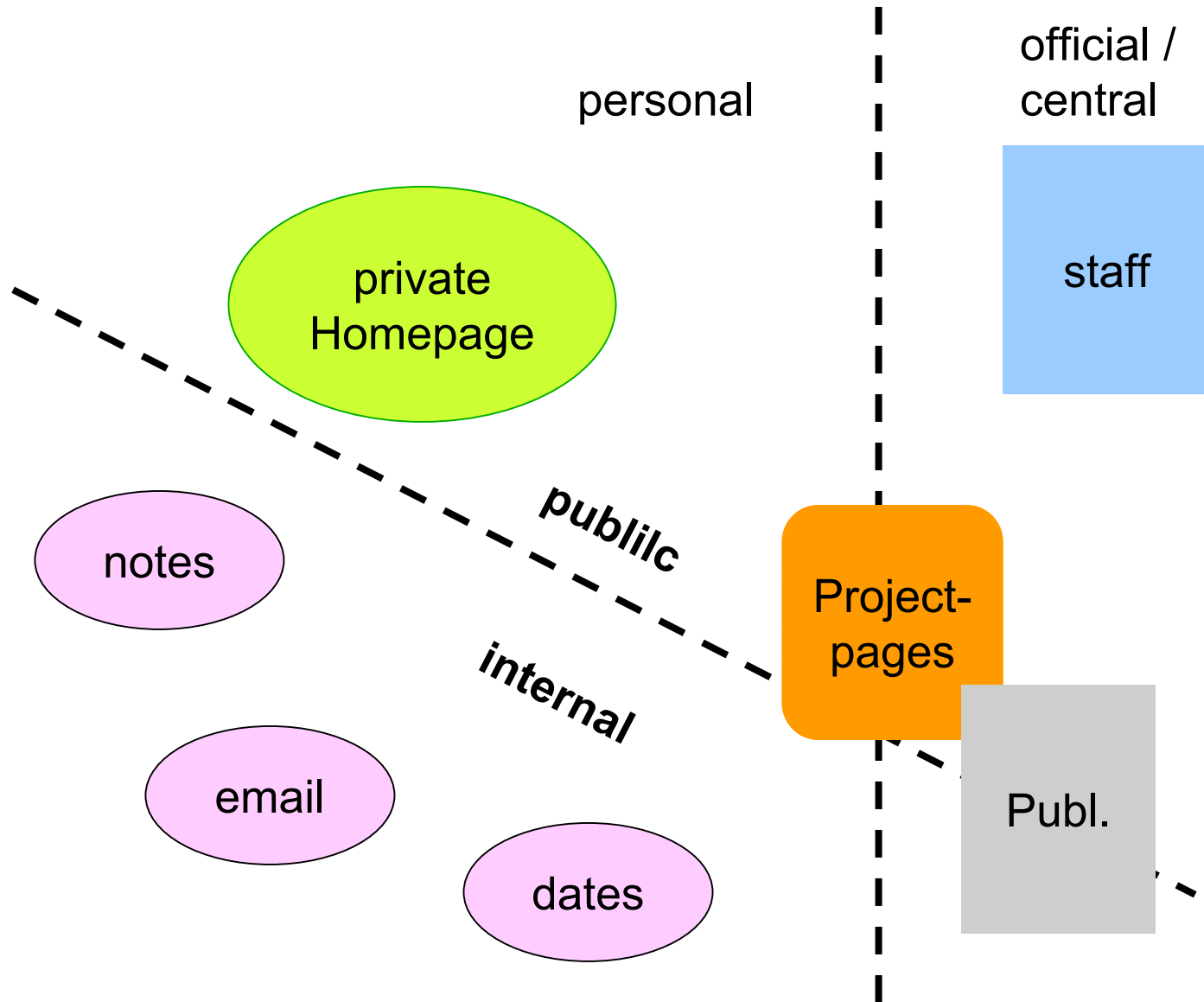
Augustin '90

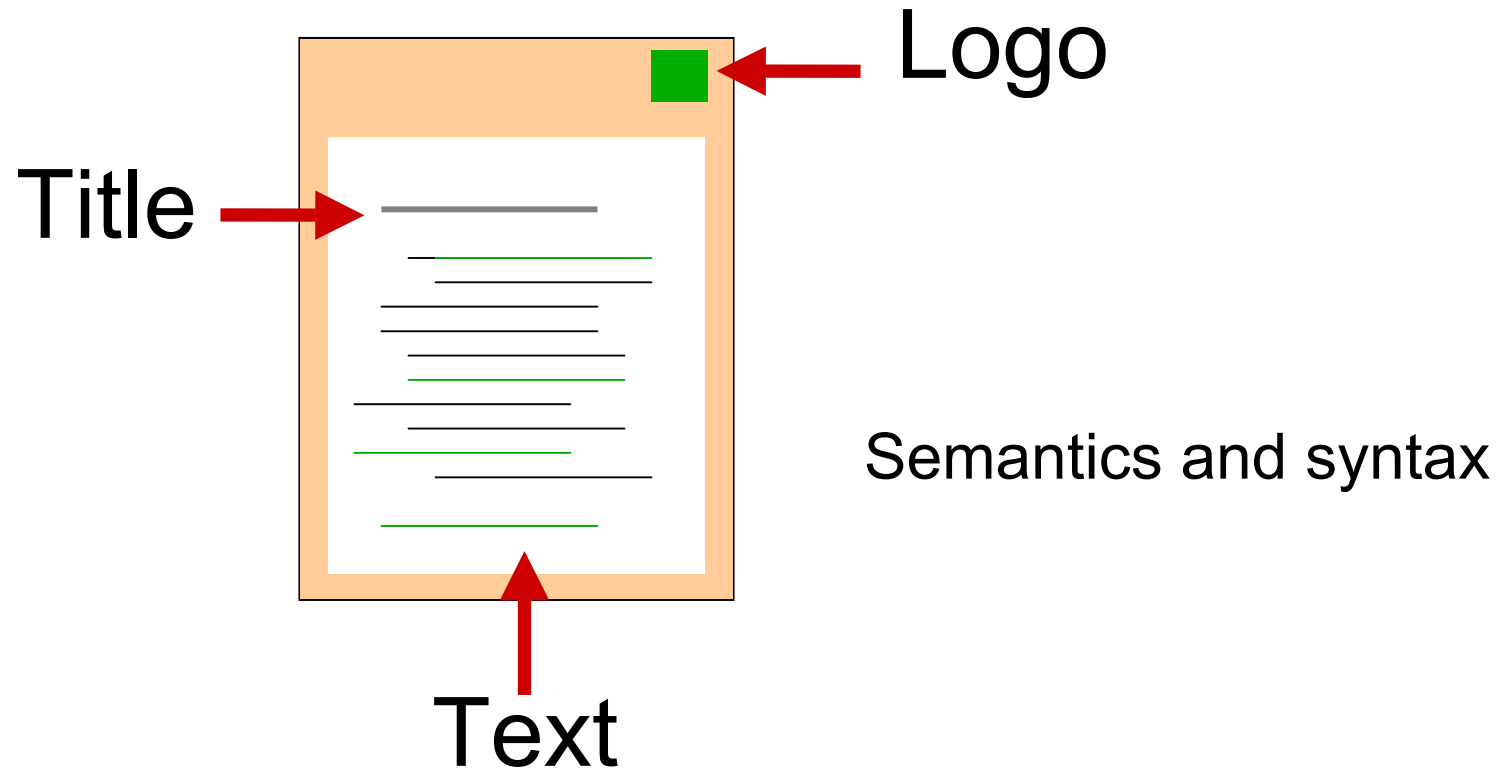
To discover the unexpected,  
verify the expected and  
make it available for re-use.

Thomas '01

- Structure information
- Collect / index data
- Present
- Store
- Make it retrievable / searchable

# Information Resources







## 15 elements:



<http://dublincore.org/>

Title

Format

Creator

Identifier

Subject

Source

Description

Language

Publisher

Relation

Contributer

Coverage

Date

Rights

Type

Research Information Portal for Telecommunications - Microsoft Internet Explorer

Adresse <http://userver.ftw.at/~kerstin/telecomportal/telecommu.html>

## Research Information Portal for Telecommunications

Research Institutes / Universities Departments

- [home](#)
- [research institutes](#)
- [documents / infos](#)
- [conferences](#)
- [definitions](#)
- [standards](#)
- [legal](#)
- [related](#)
- [search](#)
- [provider](#)

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ftw.  
upload 5/2001  
update 3/2002

**AT**

- [Fakultät für Elektrotechnik und Informationstechnik](#) TU Graz
- [Center for Telematics](#) Donau Universität Krems
- [Institut für Nachrichtentechnik/Informationstechnik](#) Uni Linz
- [Telematics](#) Information Technologies Division, ARCSeibersdorf
- [Arbeitsgruppe Mobilkommunikation](#) am [Institut für Nachrichten- und Hochfrequenztechnik](#) der TU-Wien
- [ftw.](#) Forschungszentrum Telekommunikation Wien

**AU**

- [Department of Electrical and Electronic Engineering](#) Faculty of Engineering, University of Melbourne
- [ITR](#) Institute for Telecommunications Research, University of South Australia
- [CTIE](#) The Centre for Telecommunications and Information Engineering, Monash University
- [ATRI](#) Australian Telecommunications Research Institute, Curtin University of Technology, Perth
- [Australien Telecommunication Cooperative Research Centre](#) Western Australia, Perth
- [School of Data Communications](#) Faculty of Information Technology, Queensland University of Technology
- [Faculty of Engineering](#) University of New South Wales, Sidney
- [TIIR](#) Telecommunications and Information Technology Research Institute, University of Wollongong

**BE**

- [STC](#) Service Télématique et Communication, Université Libre de Bruxelles

**CA**

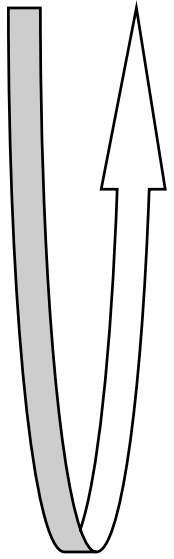
[AT](#) (7), [AU](#) (8), [BE](#) (1), [CA](#) (5), [CH](#) (3), [CO](#) (1), [CY](#) (1), [CZ](#) (1),  
[DE](#) (25), [DK](#) (2), [ES](#) (1), [FI](#) (6), [FR](#) (1),  
[GR](#) (2), [HK](#) (1), [HR](#) (1), [HU](#) (2), [IE](#) (1), [IN](#) (3), [IR](#) (2), [IT](#) (7),  
[JP](#) (2), [KR](#) (2), [NL](#) (2), [NO](#) (2),  
[PL](#) (2), [PT](#) (1), [SE](#) (6), [UK](#) (3), [US](#) (18)

<http://userver.ftw.at/~kerstin/telecomportal/telecommu.html>

Internet

Start | Research Inform... | 15:32

# Definitions



- Sign
- Data  
pure material
- Information  
data with context
- Knowledge  
interpretation of information
- Wisdom  
networked knowledge



C  
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Information  
Management

Philosophy  
Psychology

Cognition theory

Linguistics  
Neurophysiology  
Artificial Intelligence

?  
**What  
is  
Wisdom**  
?

Knowledge  
Management

Management  
Theories

Questions, comments ?



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<http://userver.ftw.at/~kerstin>