Openness in scholarship

How universities deal with the changing research publications and data landscape

Dr. Katrien Maes
Chief Policy Officer LERU

EWI – Brussels – 17 September 2014

University of Amsterdam
Universitat de Barcelona
University of Cambridge
University of Edinburgh
University of Freiburg
Université de Genève
Universität Heidelberg
University of Helsinki
Universiteit Leiden
KU Leuven
Imperial College London
University College London
Lund University
University of Milan
Ludwig-Maximilians-Universität München
University of Oxford
Université Paris-Sud 11
Pierre & Marie Curie University
Université de Strasbourg
Utrecht University
University Zurich

LEAGUE OF EUROPEAN RESEARCH UNIVERSITIES

Preview

- What is LERU
- Open scholarship, OA to publications and to data
- What LERU universities are doing
- Policies, tools, services, training: what is being developed
- LERU CIO – chair Dr Paul Ayris (UCL) - see presentation at: http://discovery.ucl.ac.uk/1443239/

LEAGUE OF EUROPEAN RESEARCH UNIVERSITIES

21 European research-intensive universities committed to the values of high quality teaching within an environment of internationally competitive research.

LERU members:

- University of Amsterdam
- Universitat de Barcelona
- University of Cambridge
- University of Edinburgh
- University of Freiburg
- Université de Genève
- Universität Heidelberg
- University of Helsinki
- Universiteit Leiden
- KU Leuven
- Imperial College London
- University College London
- Lund University
- University of Milan
- Ludwig-Maximilians-Universität München
- University of Oxford
- Pierre & Marie Curie University
- Université Paris-Sud
- University of Strasbourg
- Utrecht University
- University of Zurich

Influence policy in Europe

Develop best practice

Relevance for all RIUs

Founded in 2002

LEAGUE OF EUROPEAN RESEARCH UNIVERSITIES

What is Open Scholarship?

EnablingOpenScholarship

- Open scholarship encompasses open access, open data, open educational resources, and all other forms of openness in the scholarly and research environment
- Open Scholarship website at http://www.openscholarship.org/jcms/c_6160/en/open-scholarship
- Open Scholarship, called by the European Commission Science 2.0, is a new framework for doing research

4

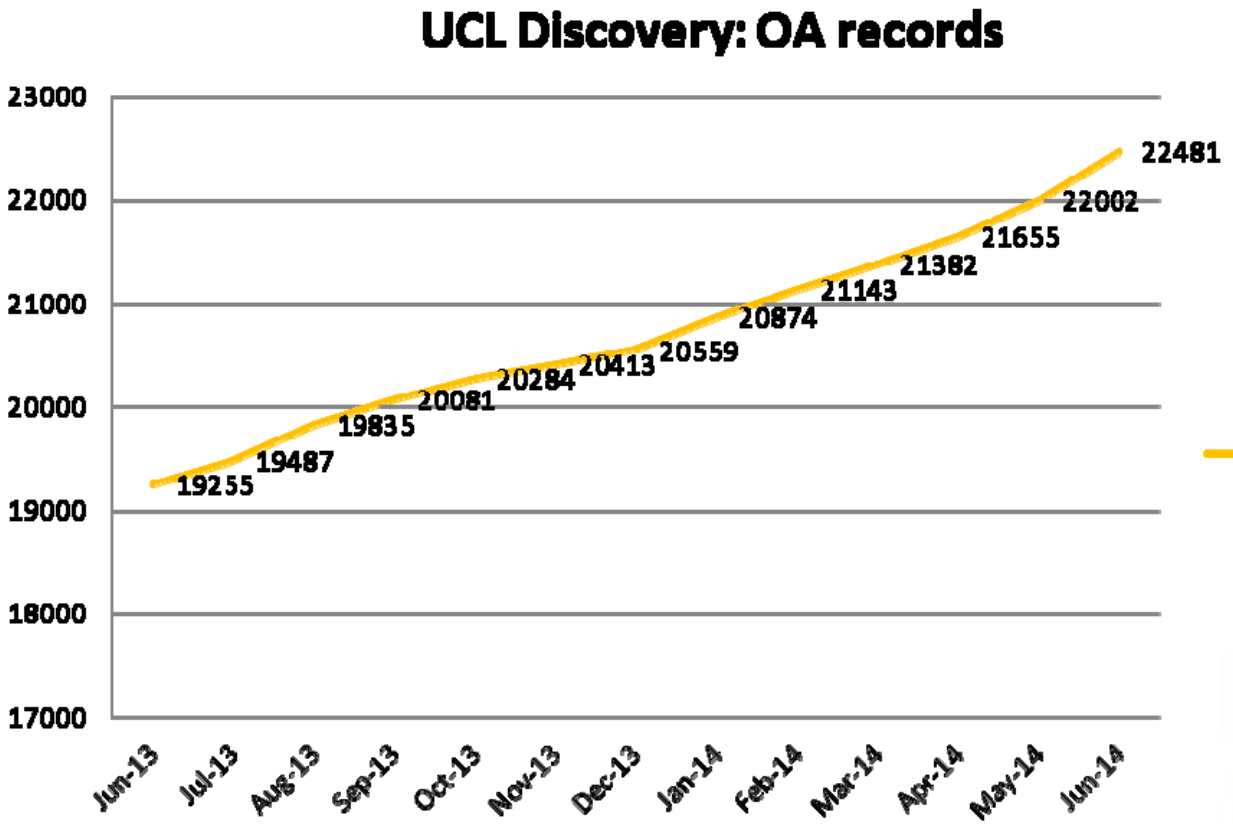
Science 2.0 consultation

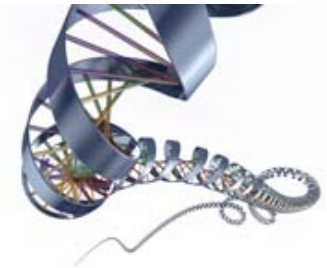
Science 2.0' describes the on-going evolution in the modus operandi of doing research and organising science. These changes in the dynamics of science and research are enabled by digital technologies and driven by the globalisation of the scientific community, as well as the need to address the Grand Challenges of our times. They have an impact on the entire research cycle, from the inception of research to its publication, as well as on the way in which this cycle is organised.

Science 2.0 consultation

- The three main objectives of the consultation are:
  - to assess the degree of awareness amongst the stakeholders of the changing modus operandi
  - to assess the perception of the opportunities and challenges
  - to identify possible policy implications and actions to strengthen the competitiveness of the European science and research system by enabling it to take full advantage of the opportunities offered by Science 2.0
- LERU Vice-Rectors (Research) are making a response

OA records: UCL Discovery

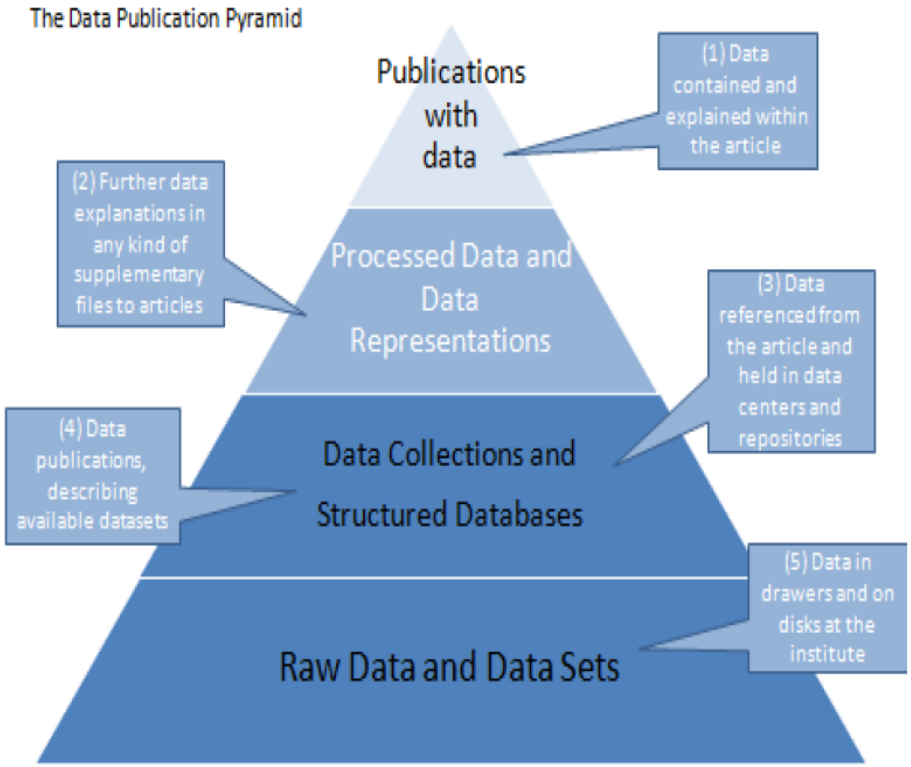




- All figures comprise local Green Full Text, and records with links to externally-held OA full text

Data: Open or Closed?

- Benefits
  - Tackle Grand Challenges in Society more easily
  - Better for research – interpretations can be checked
- Dis-benefits
  - Sharing of data not embedded in research culture
  - Some data cannot be shared (data protection, security reasons)
- Research community needs to decide…

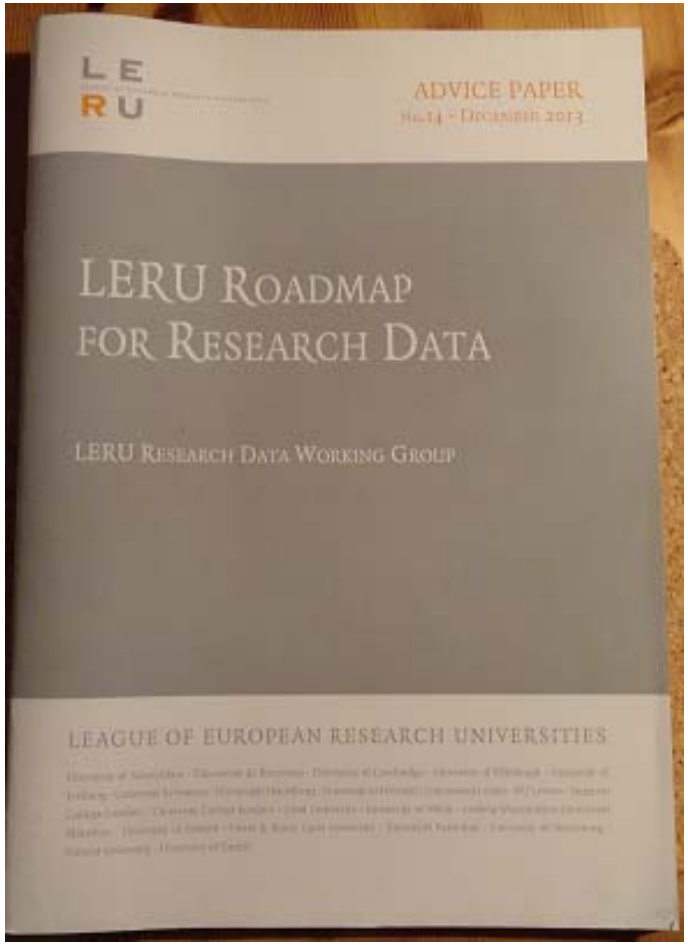


See http://www.alliancepermanentaccess.org/wp-content/uploads/downloads/2011/11/ODE-ReportOnIntegrationOfDataAndPublications-1_1.pdf

LERU Roadmap for Research Data

- Overseen by Research Data Working Group

Pablo Achard (University of Geneva)
Paul Ayris (UCL, University College London)
Serge Fdida (UPMC, Paris)
Stefan Gradmann (University of Leuven)
Wolfram Horstmann (University of Oxford)
Ignasi Labastida (University of Barcelona)
Liz Lyon (University of Bath)
Katrien Maes (LERU)
Susan Reilly (LIBER)
Anja Smit (University of Utrecht)



LEAGUE OF EUROPEAN RESEARCH UNIVERSITIES

LERU Roadmap for Research Data

1. Policy and Leadership
2. Advocacy
3. Selection and Collection, Curation, Description, Citation, Legal Issues
4. Research Data Infrastructure
5. Costs
6. Roles, Responsibilities and Skills
7. Recommendations to different stakeholder groups

The Globe, Cern, Geneva

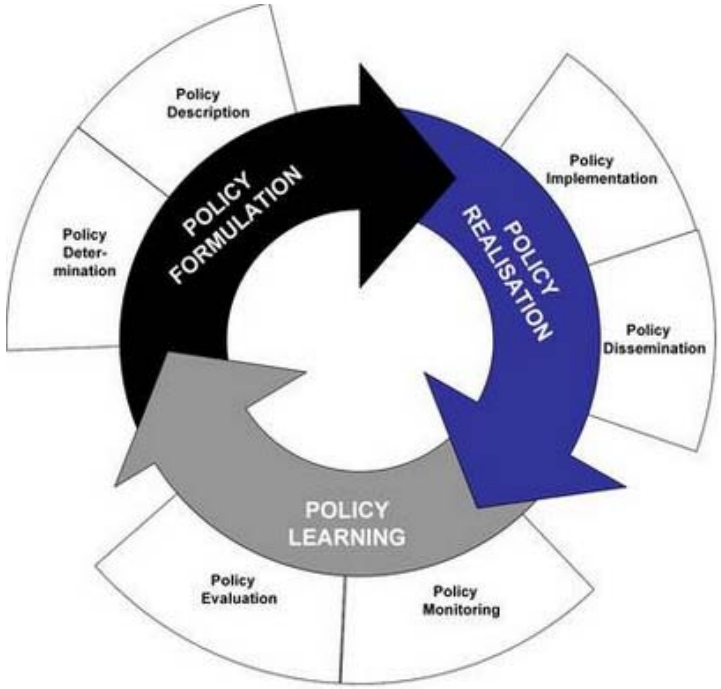
Key Messages

- Each LERU university needs a Research Data Management Strategy
- Researchers should have Research Data Management Plans
- LERU universities need to bring stakeholders together
- Benefits of ‘open data’ for sharing and re-use should be advocated and explored

King’s Cross, London

Policy Development

- Case Study on Policy development from UCL
- Drivers
  - External funders
  - Need to inform researchers
  - Raise awareness of issues facing UCL researchers
- Identifies roles and responsibilities
- Data to be made open in the most open manner appropriate



See www.lanecrothers.net/politicalprof/the-policy-cycle-and-our-frozen-politics/

- ❑ Researchers should have Data Management Plans
- ❑ LERU slams lack of data policies – *Research Europe*

Tools and Services

- Open Access publishing
- Repository services
  - LERU Law portal
  - DART-Europe
  - Copyright management

Plaster Relief by John Flaxman, Flaxman Gallery, UCL

LERU OA Legal Portal

- Portal being built by TEL (The European Library)
- All LERU OA legal publications brought together into one interface
- Value-Added Services, such as Text and Data Mining, also possible

A Box of Useful Knowledge
(Brougham Papers, UCL Library Services)

LEAGUE OF EUROPEAN RESEARCH UNIVERSITIES

DART-Europe E-theses Portal

Basic Search | Advanced Search | Browse | Search History | Marked List | Results | Full Record | Feedback | Help

ABOUT DART-EUROPE
PORTAL
DOCUMENTS & DOWNLOADS

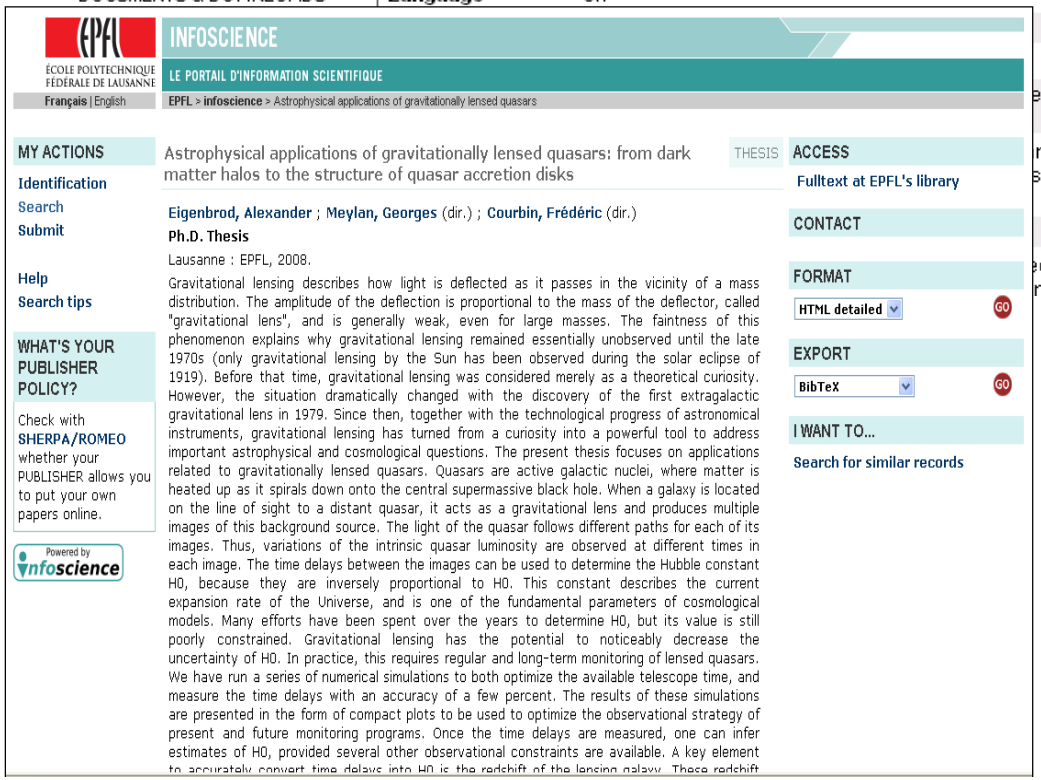
Full record

Share this record: Email address Send

Save record: Add to marked list

« Back to results

Language en



EPFL ÉCOLE POLYTECHNIQUE FÉDÉRALE DE LAUSANNE
Français | English

INFOSCIENCE
LE PORTAIL D'INFORMATION SCIENTIFIQUE
EPFL > infoscience > Astrophysical applications of gravitationally lensed quasars

MY ACTIONS
Identification
Search
Submit
Help
Search tips

WHAT'S YOUR PUBLISHER POLICY?
Check with SHERPA/ROMEO whether your PUBLISHER allows you to put your own papers online.

Powered by infoscience

Astrophysical applications of gravitationally lensed quasars: from dark matter halos to the structure of quasar accretion disks

THESIS

Eigenbrod, Alexander ; Meylan, Georges (dir.) ; Courbin, Frédéric (dir.)
Ph.D. Thesis
Lausanne : EPFL, 2008.

Gravitational lensing describes how light is deflected as it passes in the vicinity of a mass distribution. The amplitude of the deflection is proportional to the mass of the deflector, called "gravitational lens", and is generally weak, even for large masses. The faintness of this phenomenon explains why gravitational lensing remained essentially unobserved until the late 1970s (only gravitational lensing by the Sun has been observed during the solar eclipse of 1919). Before that time, gravitational lensing was considered merely as a theoretical curiosity. However, the situation dramatically changed with the discovery of the first extragalactic gravitational lens in 1979. Since then, together with the technological progress of astronomical instruments, gravitational lensing has turned from a curiosity into a powerful tool to address important astrophysical and cosmological questions. The present thesis focuses on applications related to gravitationally lensed quasars. Quasars are active galactic nuclei, where matter is heated up as it spirals down onto the central supermassive black hole. When a galaxy is located on the line of sight to a distant quasar, it acts as a gravitational lens and produces multiple images of this background source. The light of the quasar follows different paths for each of its images. Thus, variations of the intrinsic quasar luminosity are observed at different times in each image. The time delays between the images can be used to determine the Hubble constant H0, because they are inversely proportional to H0. This constant describes the current expansion rate of the Universe, and is one of the fundamental parameters of cosmological models. Many efforts have been spent over the years to determine H0, but its value is still poorly constrained. Gravitational lensing has the potential to noticeably decrease the uncertainty of H0. In practice, this requires regular and long-term monitoring of lensed quasars. We have run a series of numerical simulations to both optimize the available telescope time, and measure the time delays with an accuracy of a few percent. The results of these simulations are presented in the form of compact plots to be used to optimize the observational strategy of present and future monitoring programs. Once the time delays are measured, one can infer estimates of H0, provided several other observational constraints are available. A key element to accurately convert time delays into H0 is the redshift of the lensing galaxy. These redshift

ACCESS
Fulltext at EPFL's library

CONTACT

FORMAT
HTML detailed GO

EXPORT
BibTeX GO

I WANT TO...
Search for similar records

Astrophysical Applications of Gravitationally Lensed Quasars:
from Dark Matter Halos to the Structure of Quasar Accretion Disks

THÈSE N° 4235 (2008)

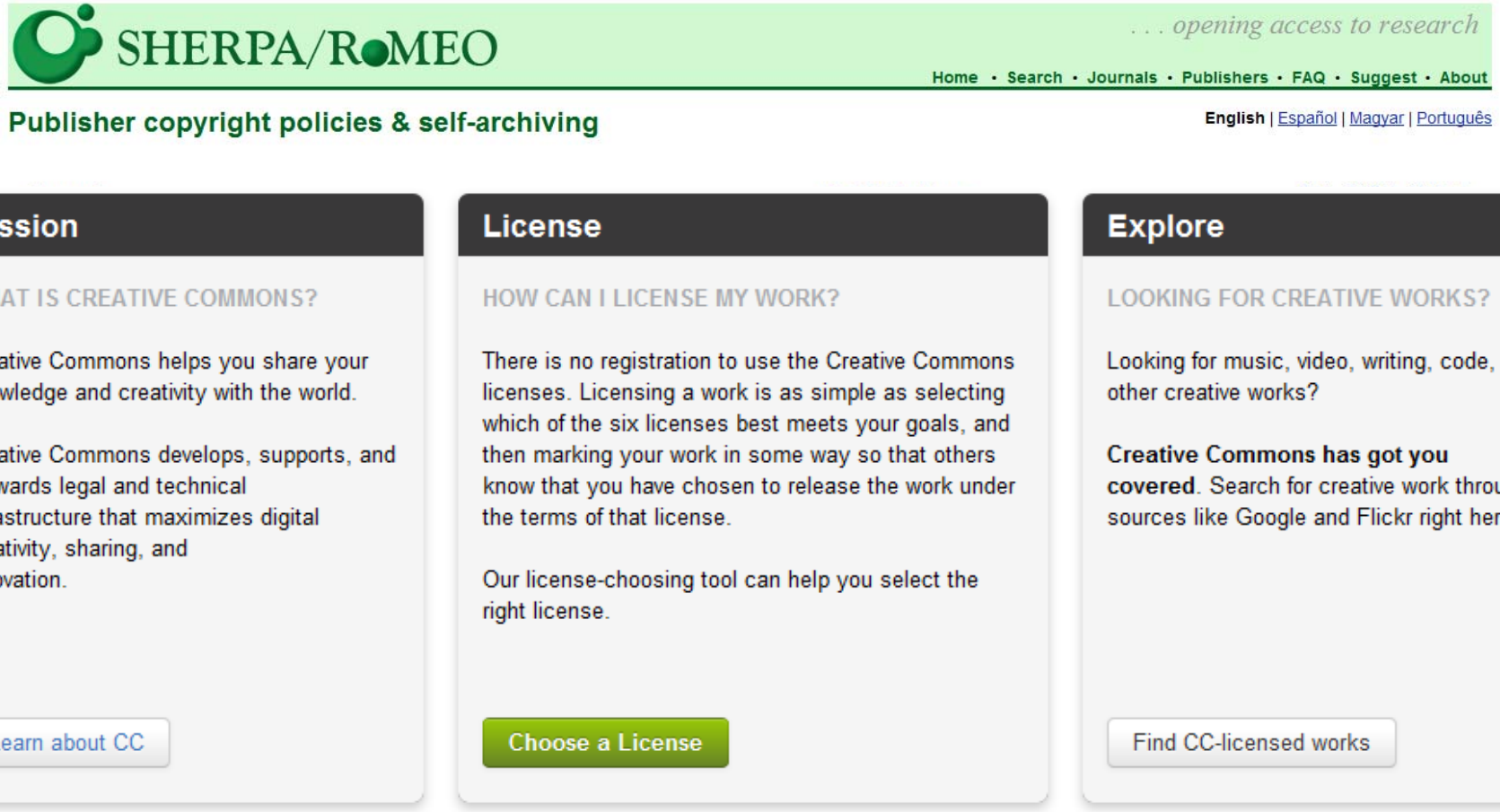
PRÉSENTÉE LE 16 DÉCEMBRE 2008
À LA FACULTÉ SCIENCES DE BASE
LABORATOIRE D'ASTROPHYSIQUE
PROGRAMME DOCTORAL EN PHYSIQUE

ÉCOLE POLYTECHNIQUE FÉDÉRALE DE LAUSANNE

http://www.dart-europe.eu

Copyright management

LEAGUE OF EUROPEAN RESEARCH UNIVERSITIES



creative commons

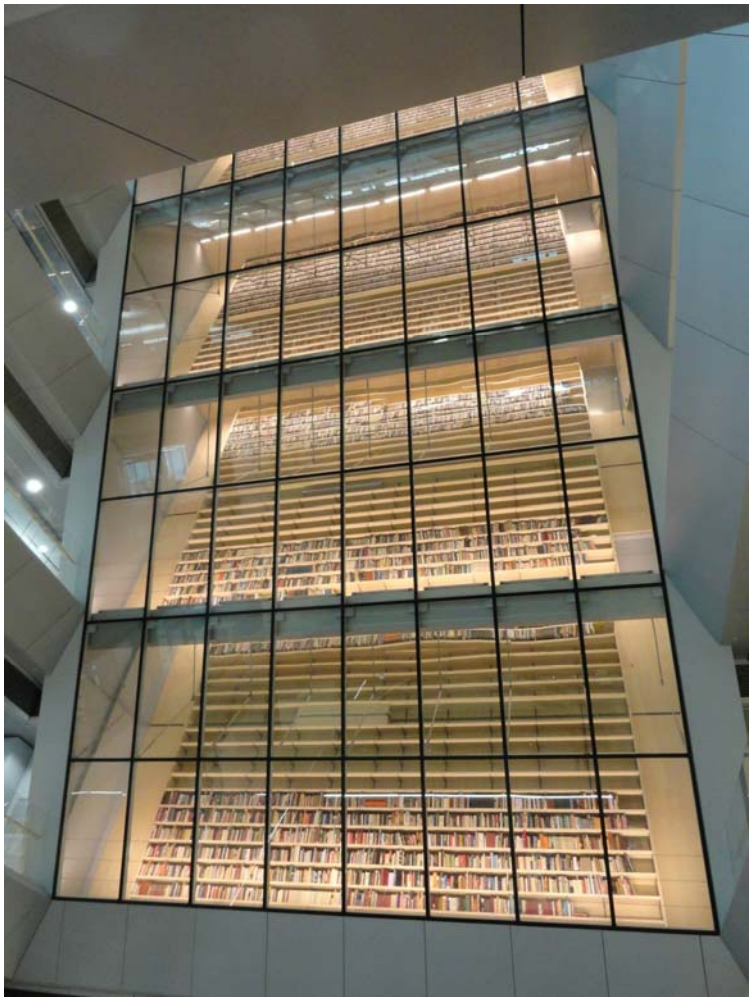
LEAGUE OF EUROPEAN RESEARCH UNIVERSITIES

"An ERA of change" Messages to the EU

- Need coordinated OA policies – national and European level
- Implement and monitor OA to publications
- Revise Copyright and Database Directive – TDM exception for education and academic research purposes. Mandatory – no overriding by contract - no licensing
- Support development of university OA infrastructure for OA publishing (monographs)
- Join up national e-infrastructures – support interoperability – access
- Integrate awareness and training

Conclusions

- Open Scholarship is a new feature of the research landscape
- Today we have discussed
  - New means of dissemination
  - Increased importance for research data
  - Tools, Services and Training needed to move forwards
- Thanks for listening
- Time for discussion



National Library of Latvia, Riga

Contact

Katrien Maes:
katrien.maes@leru.org

Info@leru.org

www.leru.org

League of European Research Universities (LERU)
Minderbroedersstraat 8
3000 Leuven
BELGIUM