

The seal of the University of Porto is a circular emblem. It features a seated female figure, likely a personification of Wisdom or Justice, holding a book. The figure is surrounded by a decorative border with the Latin motto 'VIRTVS UNITA' and the year '1122'.

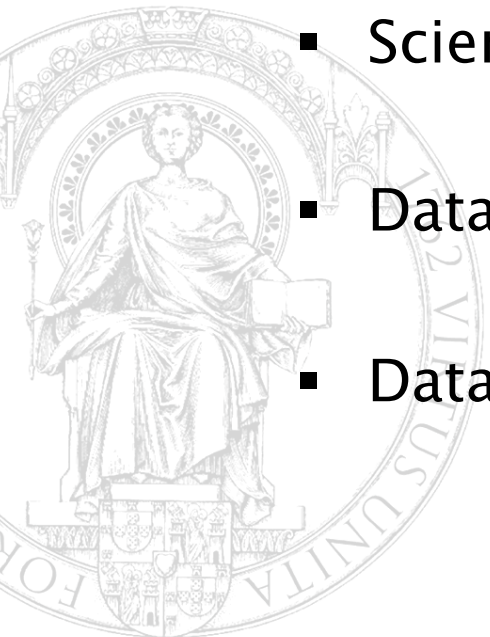
Data Curation at U.Porto: Identifying current practices across disciplinary domains

**Cristina Ribeiro – mcr@fe.up.pt
Eugénia Matos Fernandes – efernand@reit.up.pt**

IASSIST 2011
Vancouver, June 2 2011

Contents

- U.Porto: a research university
- The U.Porto Information System
- The U.Porto Institutional Repository
- Scientific Data Curation Project
 - Dataset Collection
 - Data Curation Repository



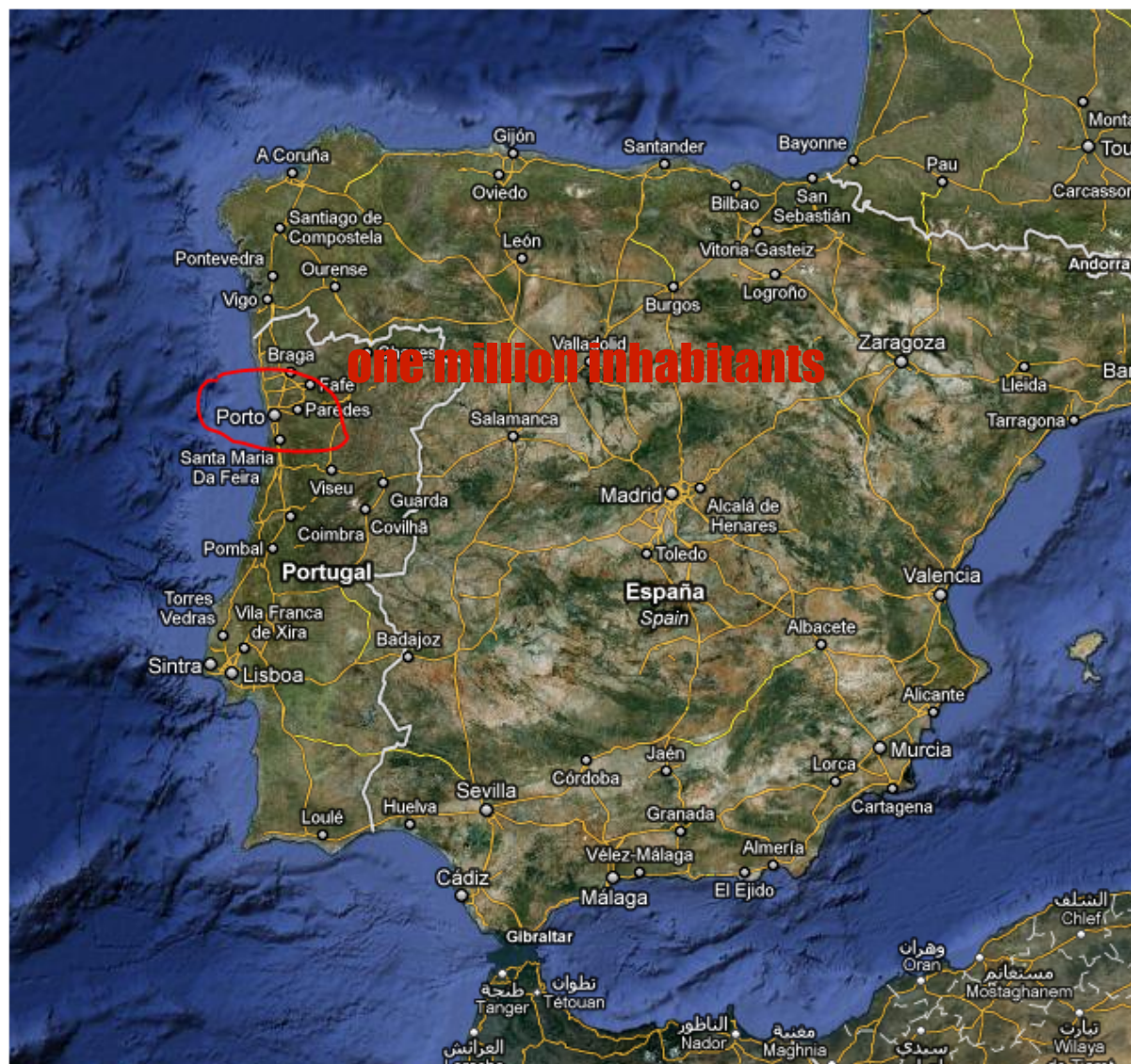
U.PORTO

- State University created the 22nd March 1911
 - Origins dating back to the 18th century
- National Law (RJIES)
 - Law n.º 62/2007 (10th September)
 - Changes HEI governance
- U.PORTO
 - New statutes (DL n.º 96/2009, the 27th April)
 - State Foundation under a private law
- U.PORTO: the largest university in Portugal
(14 public HEIs)



U.PORTO

U. PORTO :: Geographical position



U.PORTO :: Schools and Research Units

- Rectorate/Central Services
- 14 Schools
 - School of Architecture
 - School of Fine Arts
 - School of Sciences
 - School of Nutrition and Food Science
 - School of Sport
 - School of Law
 - School of Economics
 - School of Engineering
 - School of Pharmacy
 - School of Arts
 - School of Medicine
 - School of Dental Medicine
 - School of Psychology and Education Science
 - Institute of Biomedical Sciences Abel Salazar
- Business School
- 69 R&D+i units
 - 31 assessed as excellent or very good
- 30 Libraries + 12 Museums
- Student Support Services



U.PORTO :: Academic Community

▪ Students

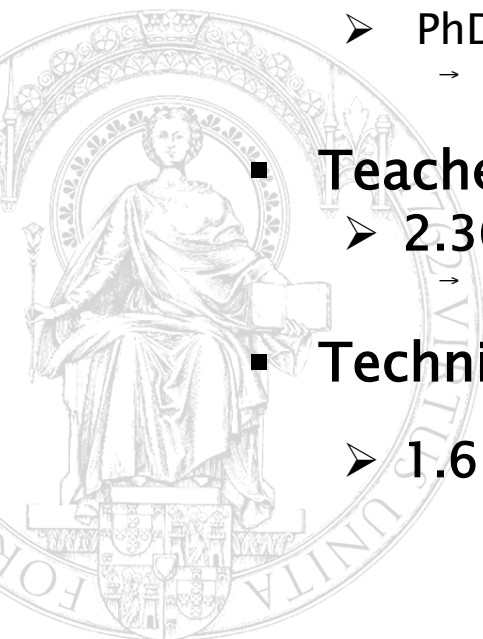
- 30.898 (total)
- 1st cycle
 - 9.647
- Integrated Master
 - 12.758
- Master + 2nd cycle
 - 5.406
- Specialization
 - 4258
- PhD + 3rd cycle
 - 2.828

▪ Teachers & researchers

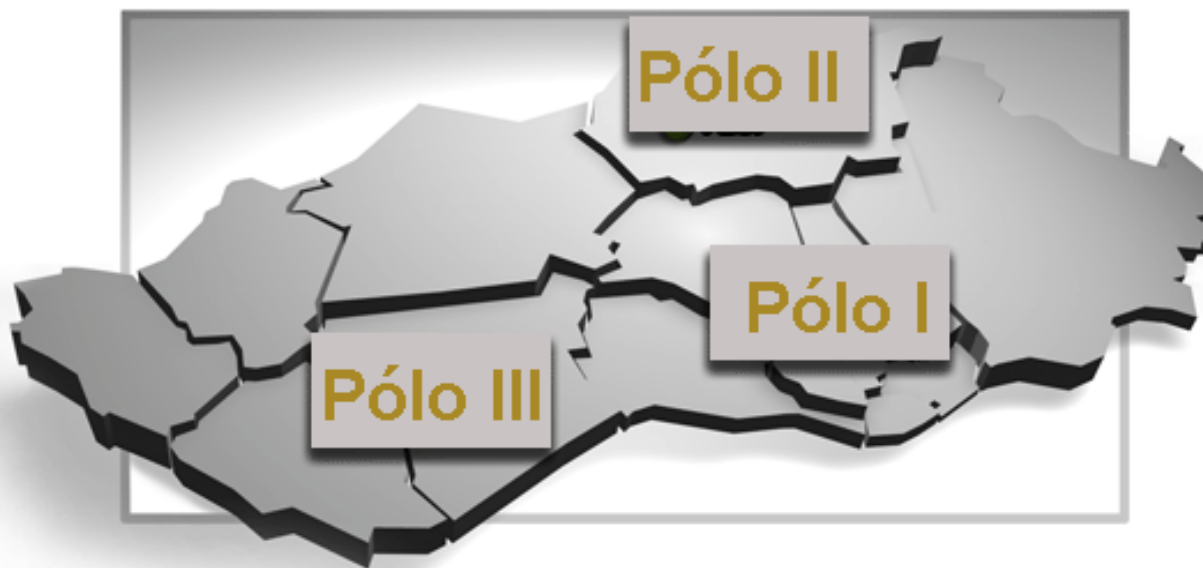
- 2.366
 - 76% PhD

▪ Technical & Administrative staff

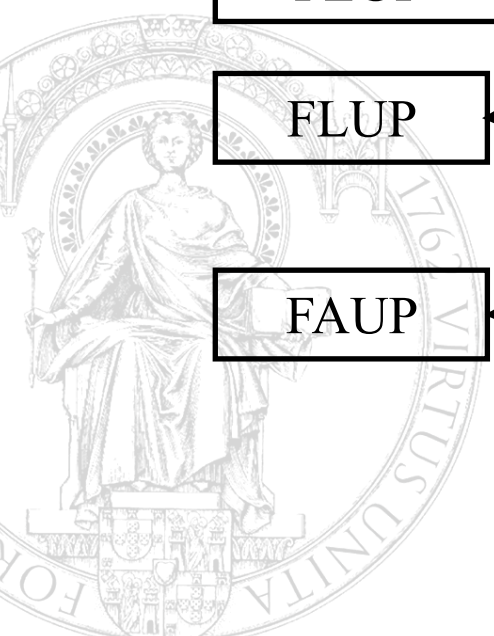
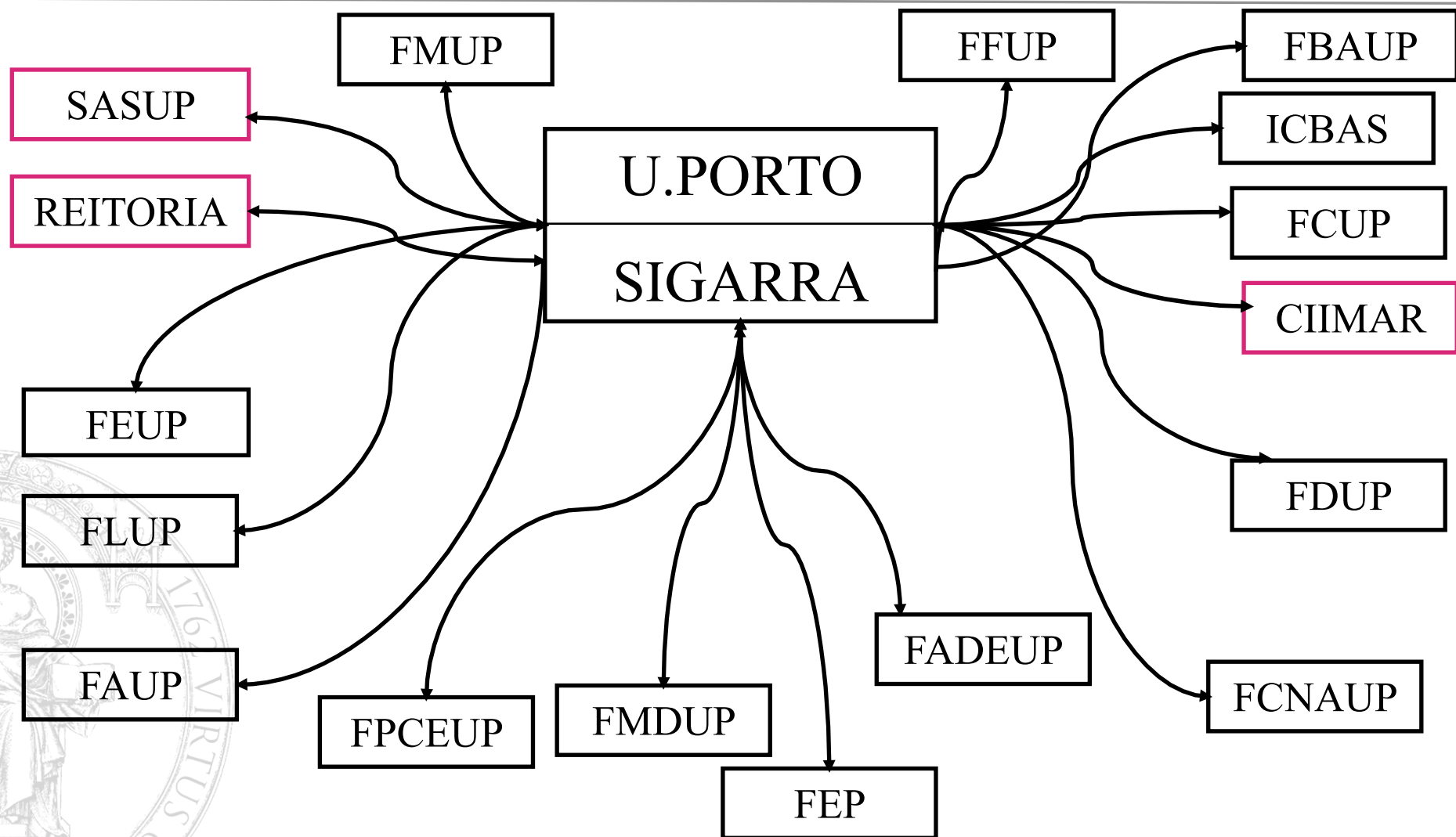
- 1.654



U.PORTO :: Geographic distribution



SIGARRA :: Today



FEUP - Faculdade de Engenharia da Universidade do Porto - Microsoft Internet Explorer

Universidade do Porto
FEUP Faculdade de Engenharia

Você está em: Início

Faculdade de Engenharia da Universidade do Porto

Apresentação
Como chegar à FEUP?
Semana da FEUP

Matrículas
2ª Fase de Candidatura

Últimas Notícias

- **2º Ciclo de Colóquios "Despertar para a Ciência Porto 2004"**
A Universidade do Porto realiza durante o mês de Outubro o 2º Ciclo de Colóquios Despertar para a Ciência Porto 2004. 13 de Outubro Comunicações Móveis: passado, presente e futuro Prof... [[Ler toda a notícia](#)].
- **Oficina de Apoio ao Software Livre**
A Faculdade de Engenharia da Universidade do Porto realiza dia 20 de Outubro uma Oficina de Apoio ao Software Livre. A iniciativa está inserida na Semana da FEUP e decorre entre as 9h30 e as 19... [[Ler toda a notícia](#)].
- **3ª Corrida da Asprela**
A Faculdade de Engenharia da Universidade do Porto realiza, no próximo dia 22 de Outubro, a 3ª edição da Corrida da Asprela. A exemplo das edições anteriores o objectivo será conhecer as... [[Ler toda a notícia](#)].
- **Cinema no Auditório da FEUP**

FDUP - Faculdade de Direito da Universidade do Porto - Microsoft Internet Explorer

Universidade do Porto
FDUP Faculdade de Direito

Você está em: Início

Faculdade de Direito da Universidade do Porto

Apresentação

Inscrições nas Licenciaturas Via Web (excepto 1º ano, 1ª vez)
Pode efectuar a sua inscrição em qualquer posto Internet!

Últimas Notícias

- **Eleições - Assembleia de Representantes e Conselho Pedagógico**
Inicia-se a 11 de Outubro, com a publicação dos cadernos eleitorais, o processo eleitoral para a constituição da Assembleia de Representantes e Conselho Pedagógico. O Conselho Directivo, na sua... [[Ler](#)]

FPCEUP - Faculdade de Psicologia e de Ciências da Educação da Universidade do Porto - Microsoft Internet Explorer

Universidade do Porto
FPCEUP Faculdade de Psicologia e de Ciências da Educação

Você está em: Início

Faculdade de Psicologia e de Ciências da Educação da Universidade do Porto

Apresentação
Biblioteca
HORÁRIOS

Inscrições nas Licenciaturas Via Web (excepto 1º ano, 1ª vez)
Pode efectuar a sua inscrição em qualquer posto Internet!

Últimas Notícias

- **Apresentação do SIGARRA para Alunos da LUP**
No próximo dia 20 de Outubro, às 17 horas, no Auditório da Reitoria, terá lugar uma apresentação do sistema SIGARRA para os alunos de todos os cursos da Universidade do Porto. Para mais... [[Ler toda a notícia](#)].
- **PROVAS DE MESTRADO**
Dia 13 de Outubro de 2004, às 10,30 horas - sala 1 - Provas de MESTRADO EM CIÊNCIAS DA EDUCAÇÃO na área de especialização de EDUCAÇÃO, DESENVOLVIMENTO LOCAL E MUDANÇA SOCIAL, requeridas pelo ... [[Ler toda a notícia](#)].
- **Serviço de Consulta Psicológica de Orientação Vocacional**

FEP - Faculdade de Economia da Universidade do Porto - Microsoft Internet Explorer

Universidade do Porto
FEP Faculdade de Economia

Você está em: Início

Faculdade de Economia da Universidade do Porto

Apresentação
Serviço Informática
Biblioteca
ECTS Guide
Conferência EARIE'05

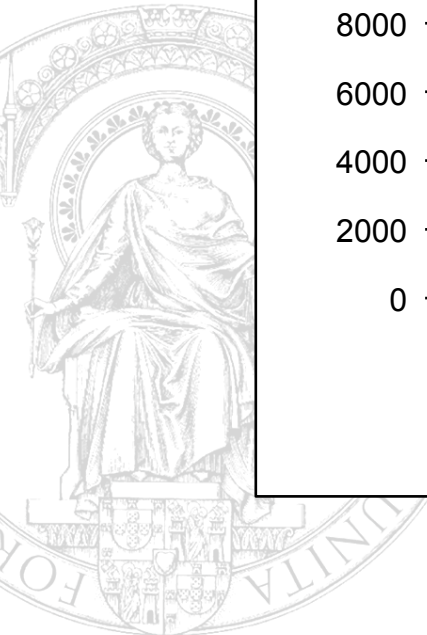
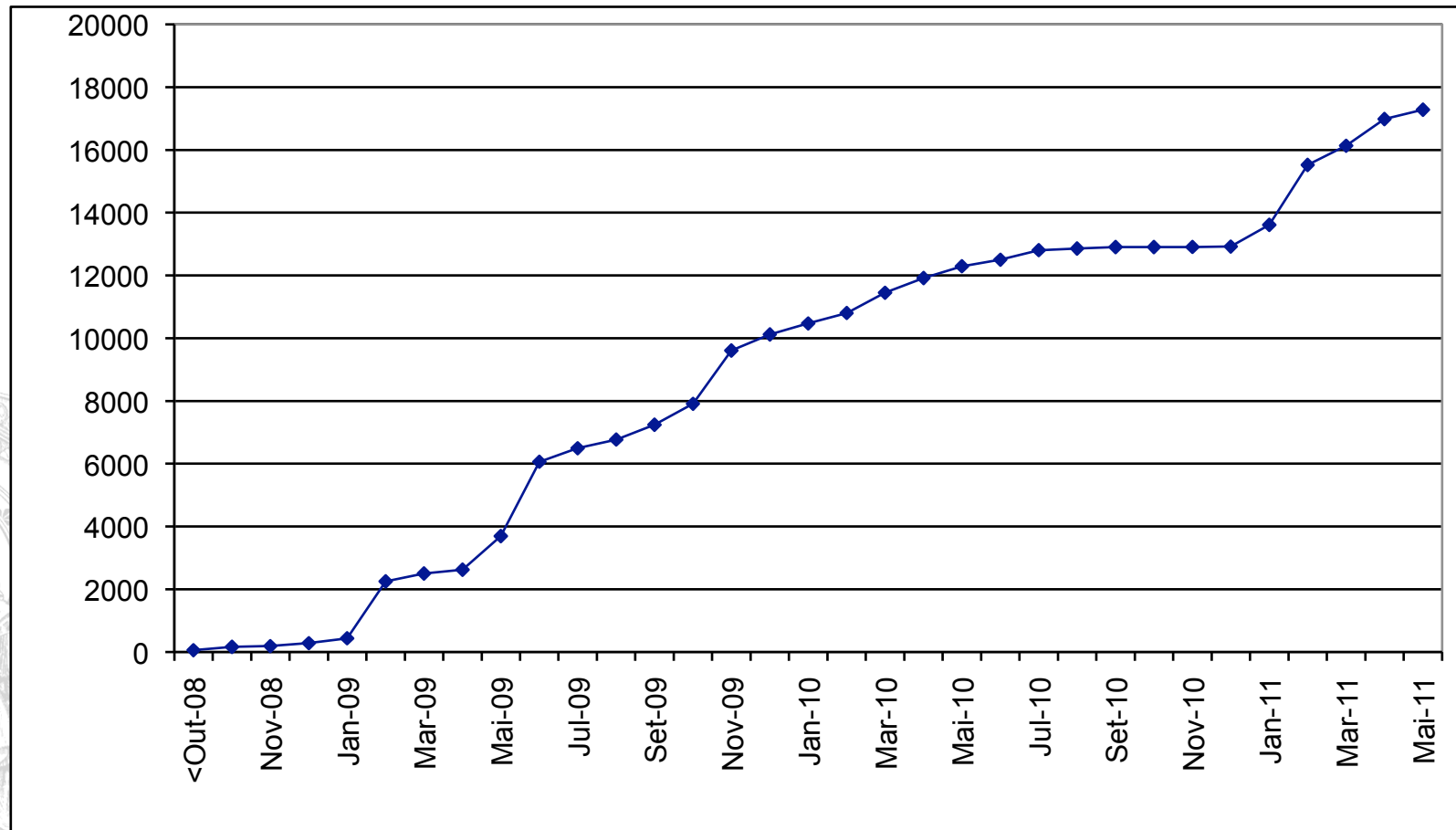
Inscrições nas Licenciaturas Via Web (excepto 1º ano, 1ª vez)
Pode efectuar a sua inscrição em qualquer posto Internet!

Últimas Notícias

- **Defesa de Tese do Mestrado em Economia**
Defesa de tese a ter lugar no dia 20 de Outubro de 2004, pelas 15:00, no Auditório 260, do candidato Licenciado Paulo Daniel Duarte Vieira, tendo como título "Análise Bi-etápica da Eficiência..." [[Ler toda a notícia](#)].
- **Novo Working Paper da FEP**
WP nº 159: Low cost carriers, secondary airports and State aid: an economic assessment of the Charleroi affair. Cristina Barbot. Abstract: In this paper a vertical differentiation model is built... [[Ler toda a notícia](#)].
- **Audições eCOROMia, TAFEP, TFEP**
eCOROMia Já pensaste em tornar-te um membro activo da faculdade? Queres fazer parte de um grupo de pessoas que juntas guardam recordações de muitos e bons momentos que de certeza recordarás por...

U.PORTO :: Open Repository

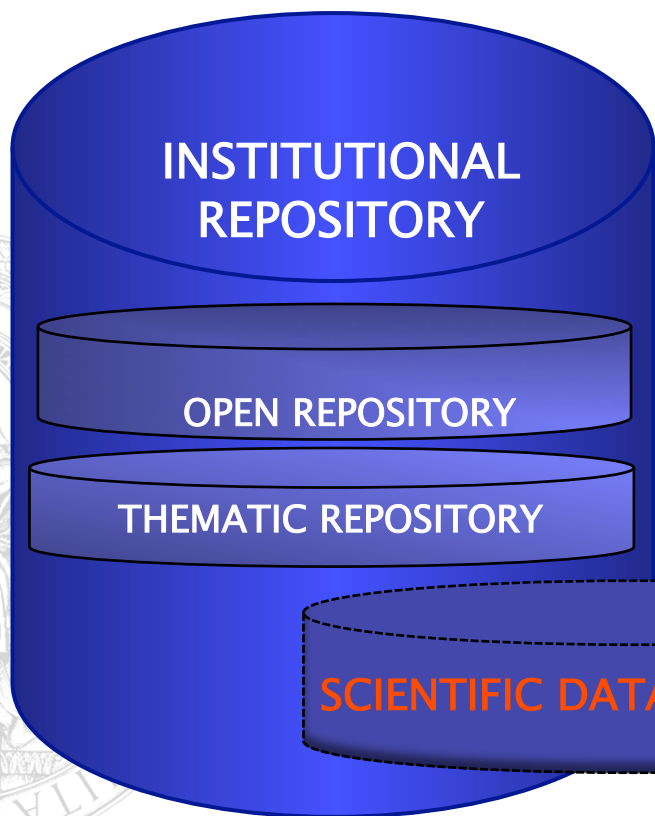
Open Repository Publications (2008–2011)



Institutional Repository :: Ongoing project



**Full text
Open access**



- Ingest
- Storage
- Preservation
- Access
- Dissemination



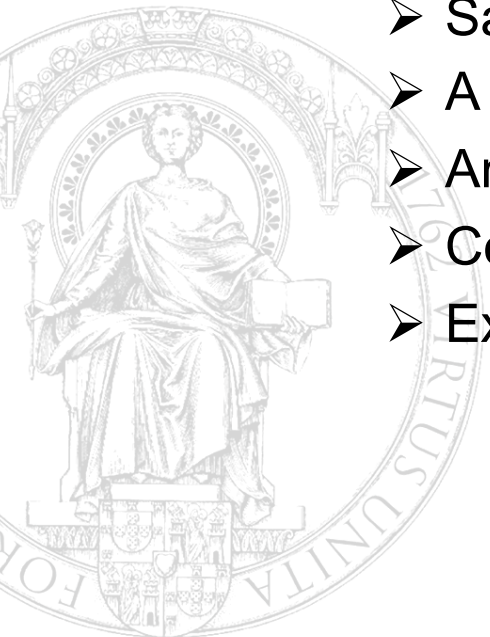
U.PORTO :: Vision

- Goals:
 - transform U.PORTO into a **Research University** by increasing the quantity and quality of research work
 - **reach excellence** in the various levels of higher education, according to **international standards**
 - reinforce U.PORTO's **internationalisation**



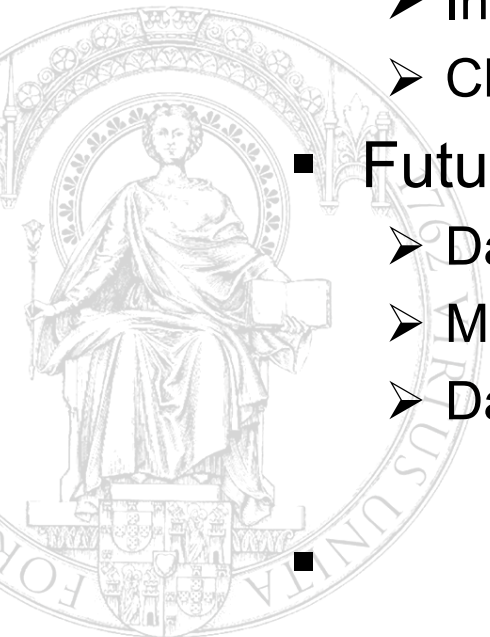
U.PORTO :: Data Curation Initiative

- Curation of and access to the scientific data generated by researchers
- Short study: February 1 to September 30, 2011
- Expected results
 - Sample of existing datasets
 - Sample of existing curation practices
 - A first impression on researchers' needs
 - Analysis of datasets from a technical point of view
 - Collection of datasets in a standard repository platform
 - Experimental interrogation of datasets



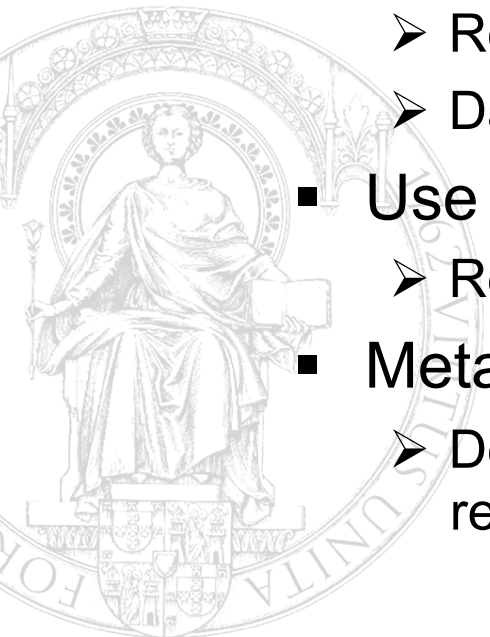
U.PORTO :: Data Curation Initiative :: Method

- Concluded
 - Interviews with researchers
 - Identification of use cases
 - Collection of datasets
- Ongoing
 - Information modeling for datasets
 - Choice of repository platform
- Future
 - Data curation platform
 - Metadata model
 - Datasets available on chosen platform



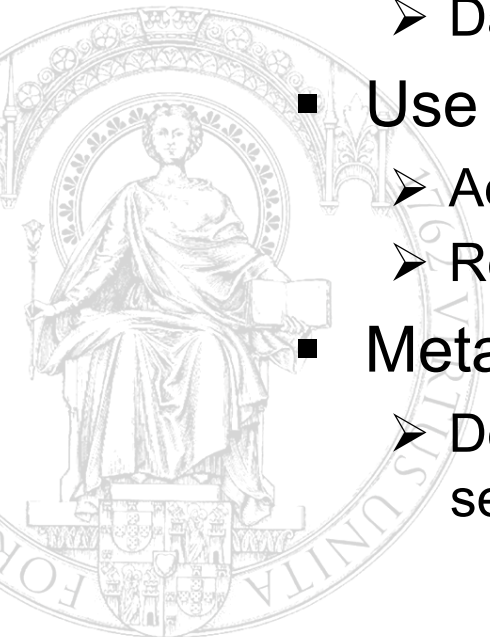
Data Curation :: Dataset 1 :: Gravimetry

- The Astronomic Observatory of U.Porto
- Researchers from: Science School
- Data: gravimetry measures
 - Data collected in campaigns at several Portuguese regions
 - Dataset is data from 1 campaign
- Curation
 - Researchers replicate data in personal machines and in CD
 - Data in active use for Ph.D. research
- Use Case
 - Researchers or industry get gravimetry dataset
- Metadata
 - Description used by researchers, has to be enriched for the repository



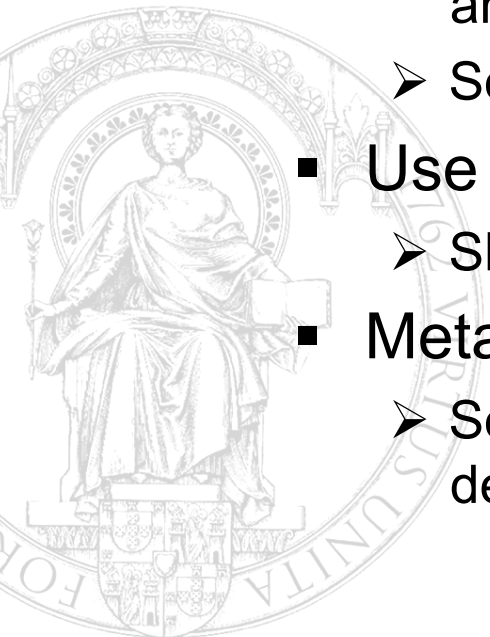
Data Curation :: Dataset 2 :: Pollution

- The Engineering School, Chemical Department
- Data: pollutant densities
 - Data collected in a Portuguese harbor
 - Dataset is data from 1 set of samples for a single date
- Curation
 - Researchers replicate data in personal machines and in CD
 - Data in active use for a university contract
- Use Case
 - Administrative entity gets results analysis
 - Researchers use data as a time series
- Metadata
 - Description provided by researchers, has to be completed with set-level description



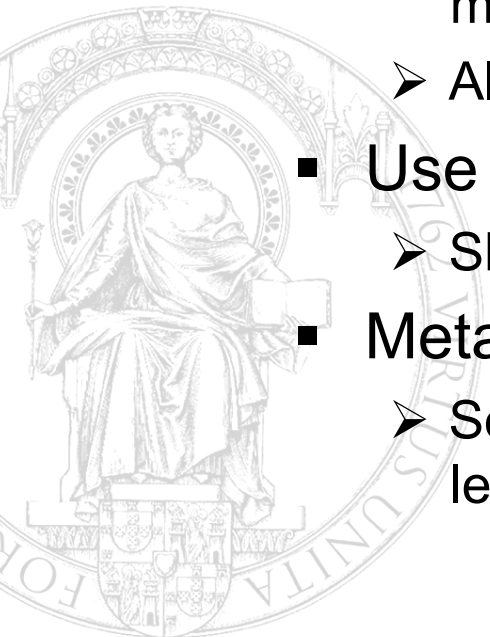
Data Curation :: Dataset 3 :: Materials Mechanics

- The Engineering School, Mechanical Eng. Department
- Data: materials fracture
 - Data collected in experimental setup
 - Dataset is data from 1 experiment
- Curation
 - Group leader keeps copies of files, experimental results and analysis using simulation
 - Some data in active use for research, other not
- Use Case
 - Sharing data with other research groups
- Metadata
 - Some description available in the Excel files, requires set-level description



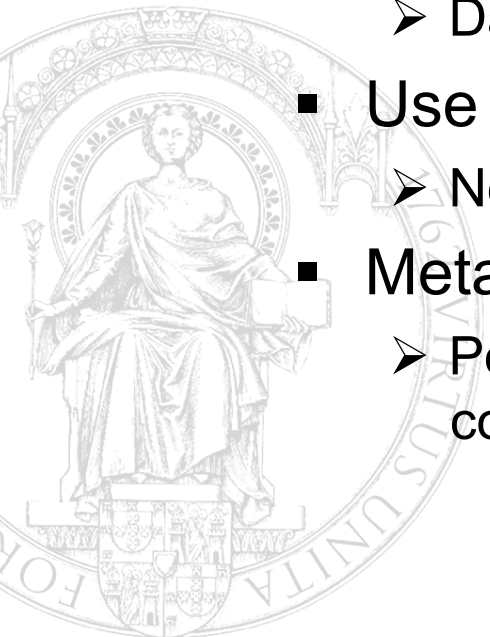
Data Curation :: Dataset 4 :: Civil Engineering

- The Engineering School, Civil Eng. Department
- Data: sensor data from high-speed railways
 - Data collected in experimental setup
 - Dataset is data from 1 experiment
- Curation
 - Group members keeps files, including experimental results, models and analysis using simulation
 - All data in active use for research
- Use Case
 - Sharing data with research partners
- Metadata
 - Some description communicated by researchers, requires set-level description



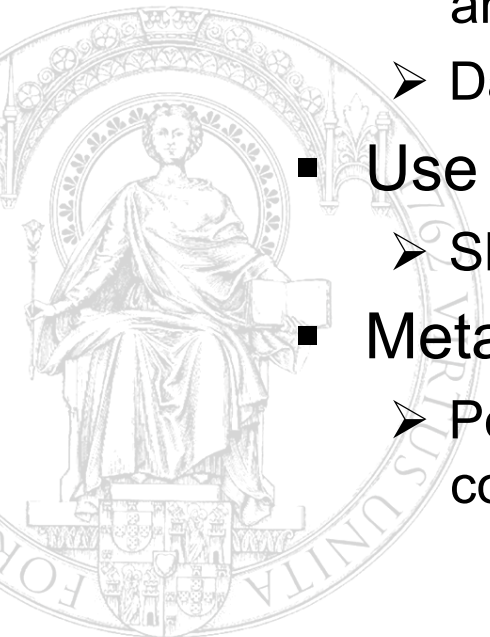
Data Curation :: Dataset 5 :: Education Science

- The Psychology and Education Science School
- Data: interviews about basic school experiences
 - Data collected from people in a region
 - Dataset is data from 1 set of interviews
- Curation
 - No concern with curation yet
 - Data in active use for an M.Sc. thesis
- Use Case
 - None identified
- Metadata
 - Possible metadata set from the interview script, has to be completed with set-level description



Data Curation :: Dataset 6 :: Psychology Data

- The Psychology and Education Science School
- Data: sensor data from experiments with people
 - Data collected in lab conditions
 - Dataset is data from 1 experiment
- Curation
 - Group leader keeps copies of files, experimental results and analysis
 - Data provided is not in active use for research
- Use Case
 - Sharing data with other research groups
- Metadata
 - Possible metadata set from the experimental setup, has to be completed with set-level description



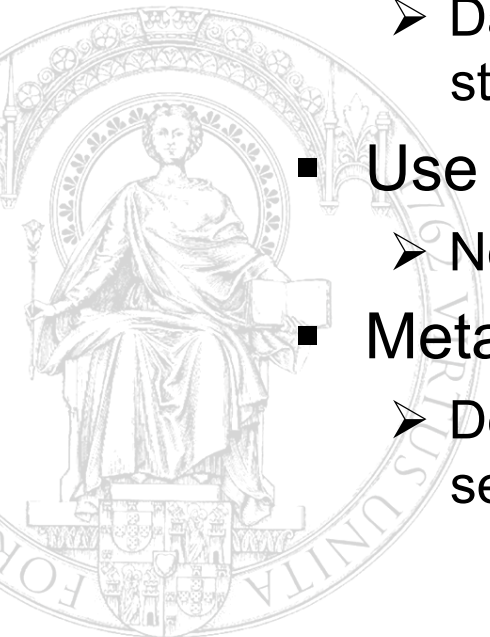
Data Curation :: Dataset 7 :: Ecology

- The Sciences School, Biology Department
- Data: geo-referenced species
 - Data collected in selected Portuguese regions
 - Dataset is data from 1 set of samples for a single region
- Curation
 - Researchers are preparing a curation plan in the context of an international project
- Use Case
 - Data exchange in collaborative international projects
- Metadata
 - Description provided by researchers
 - Set-level description according to emerging standards



Data Curation :: Dataset 8 :: Economy

- The Economy School, Econometrics Group
- Data: population statistics
 - Data aggregated from official agencies
 - Dataset is data from 1 aggregation
- Curation
 - Researchers replicate data in personal machines and in CD
 - Data can be generated again from the official databases with stored queries
- Use Case
 - Not identified yet
- Metadata
 - Description provided by researchers, has to be completed with set-level description



Data Curation :: Preliminary conclusions

- Very diverse data
 - Data with very different structure, contents and volume
- Similar use cases in data search
 - Suggests models with common search features
- Dataset-level metadata
 - DCMI- Science Metadata
- U.Porto Data Repository
 - Project encourages the definition of a data curation policy
- Open Access is not yet an issue
 - Project contributes to get researchers confidence on the approach first

