



# ZOOLOGY 2014

Université  
de Liège



## Open Access, dream or reality for scholars: The ULg experience

*Paul Thirion  
Head librarian ULg*

**YES!! All is free  
on Internet !!**

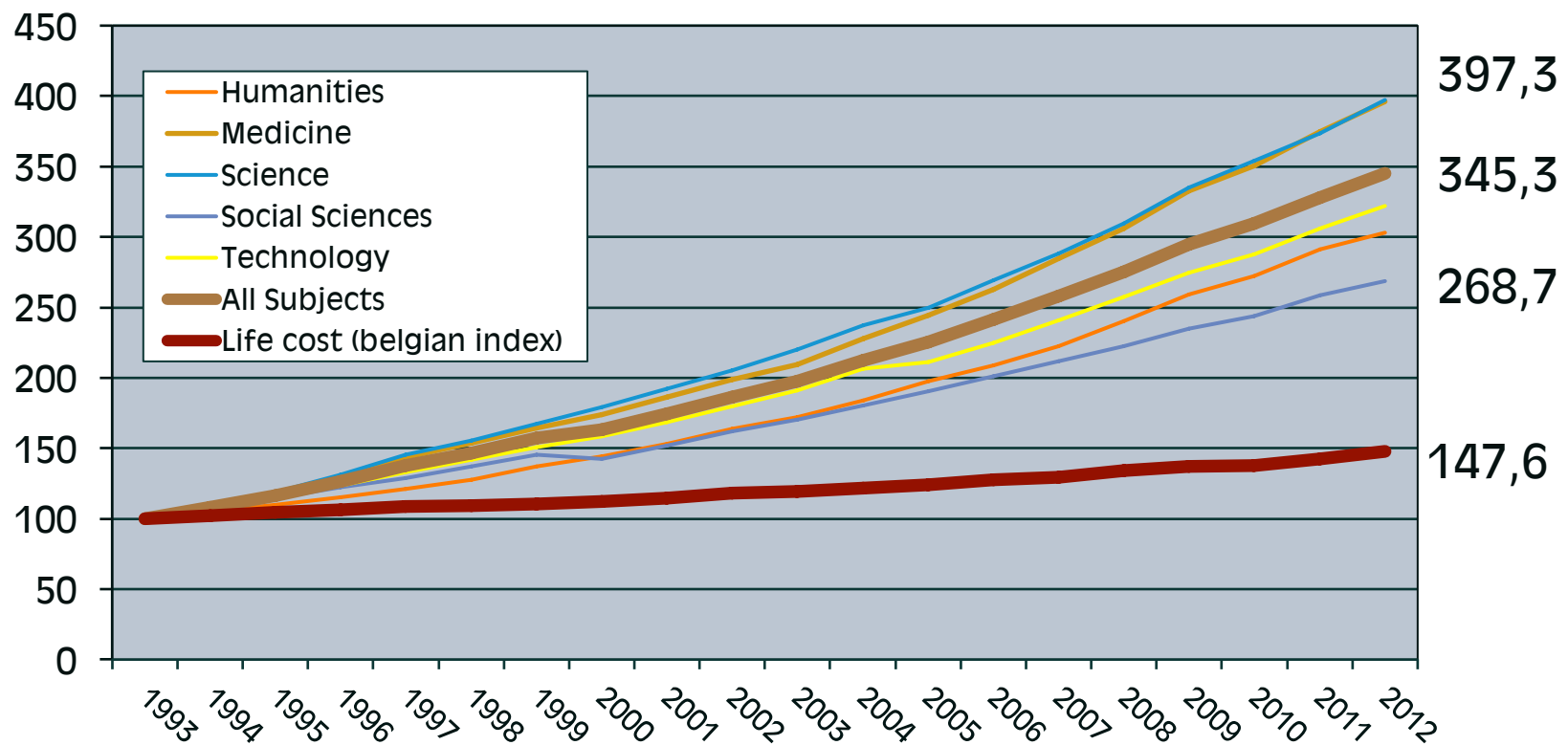


mmm...

*...I said something  
stupid??*

# Serial price crisis...

Serial price increase compared to the evolution of life cost  
(on a base 100 in 1993)



Based on 70.000 titles (profit and non profit publishers)

Source: Swets

# Just an example.

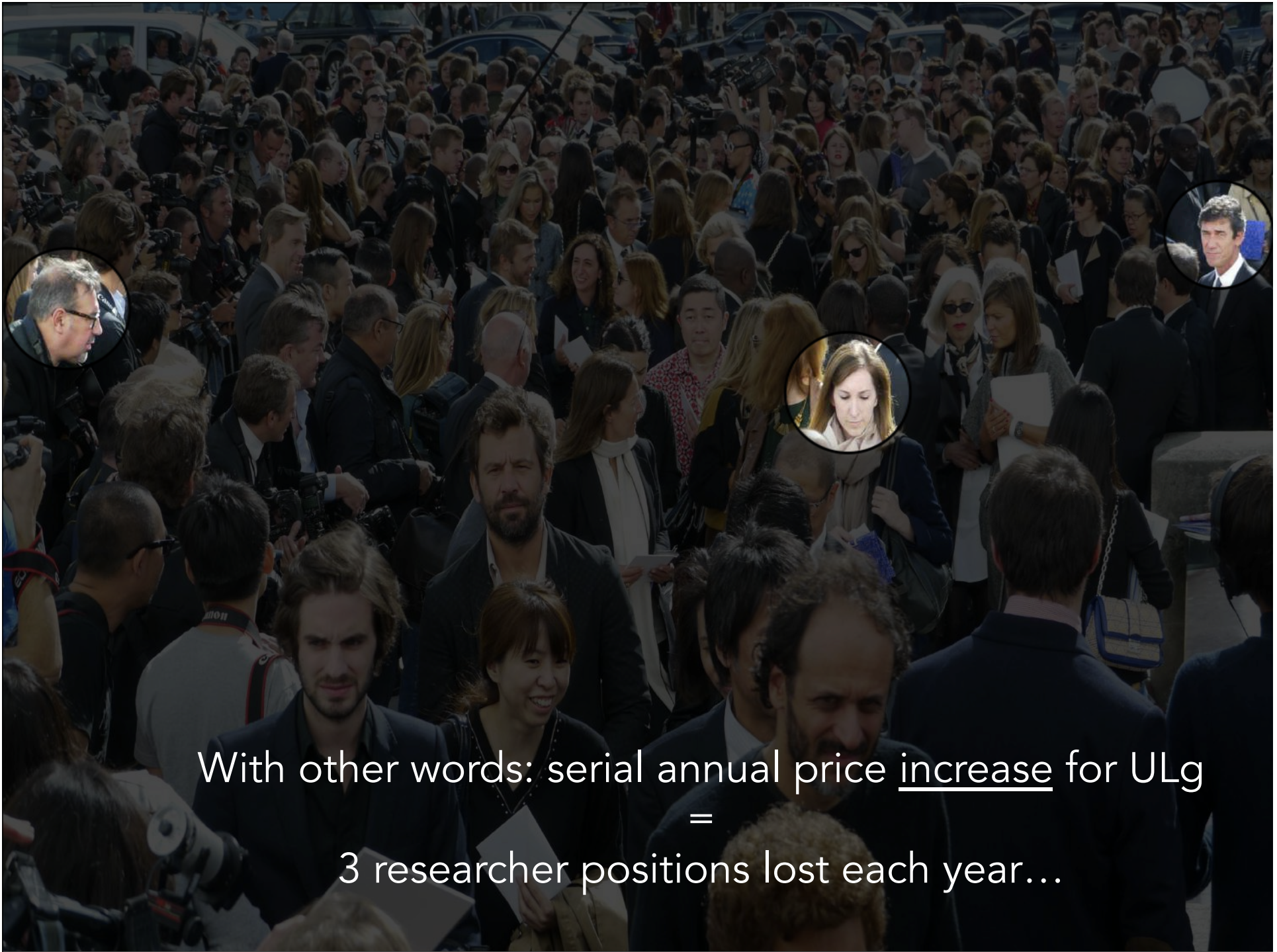
Serials cost for ULg:

**Scientific information:  
luxury? ... or vital!**

**More than 2.8 million dollars/year**

**= a new Porsche every 10 days ...**






With other words: serial annual price increase for ULg  
=  
3 researcher positions lost each year...

# An almost perfect balance...

## Scientific community

- Conceive
  - Search
  - Find results
  - Write articles
  - Correct them
  - Pay to be published
  - Play the role of editors
  - Review and validate articles
  - Buy serials
  - Read articles
  - ...
- 

- Elsevier official net profit (after taxes):
  - 33,2% in 2002 (429M€ on 1295M€)
  - 37,8% in 2012 (780M€ on 2063M€)
- Springer Science: 33.9%
- John Wiley & Sons: 42%
- ...

## Publishers

- Buy titles
  - Print (e-print)
  - Sale
  - ... and make money!
- 



We are serials dependants...



# +99.5% of the World population have no access to our papers

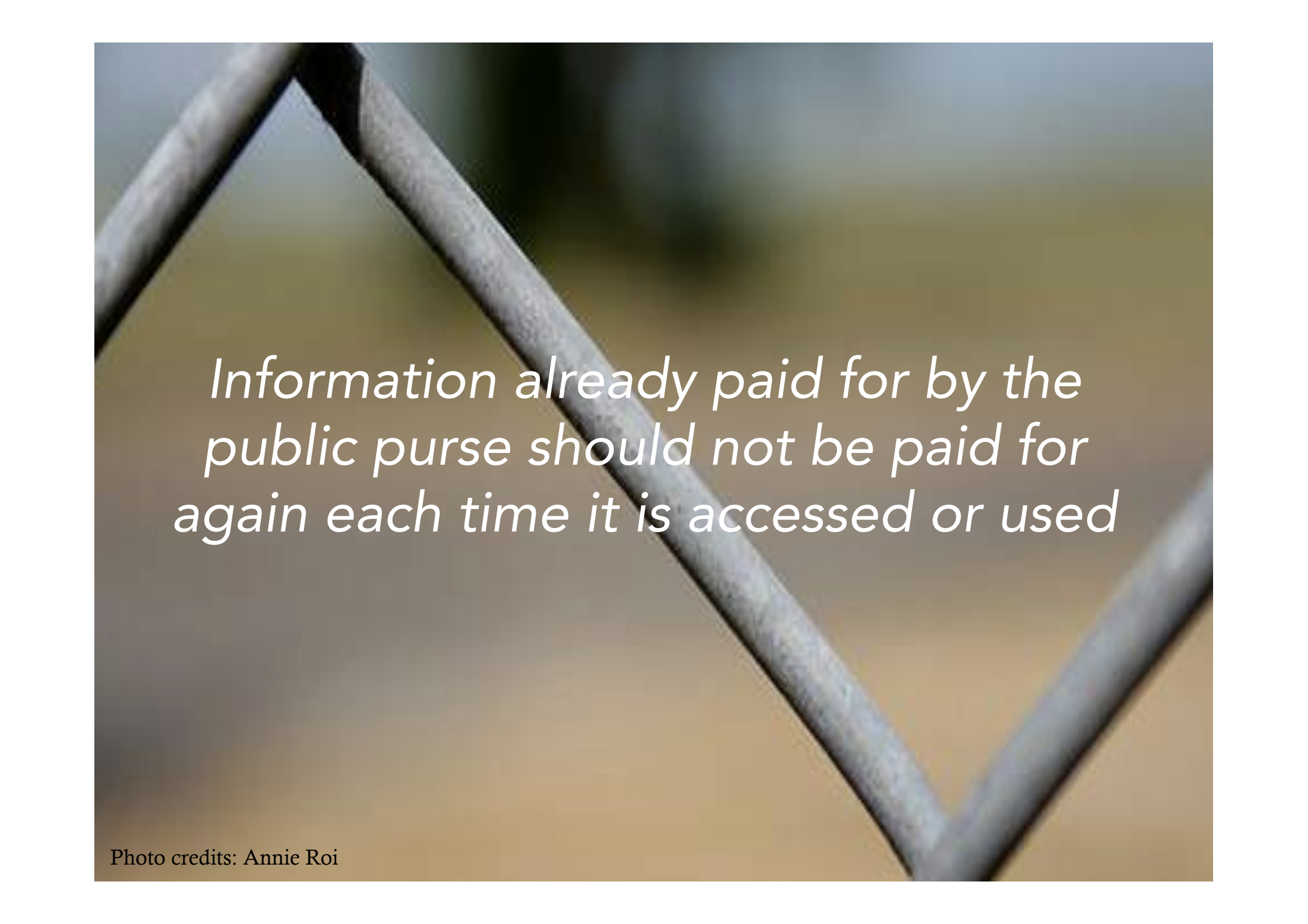
- ◆ Developing & emerging countries!
- ◆ No university in the world can afford the literature their researchers need!
- ◆ What about small and medium business?
- ◆ ...



## **Why are we making science?**

- ◆ To guarantee very large profits for a few?
- ◆ Or to enable the largest dissemination of knowledge for the well being of humanity?



A close-up photograph of a metal railing, likely made of stainless steel, with a blurred background. The railing consists of several vertical bars connected by horizontal bars, forming a grid-like structure. The lighting is soft, and the background is a mix of muted colors, possibly a wall or a window with a view of the outdoors.

*Information already paid for by the public purse should not be paid for again each time it is accessed or used*

Photo credits: Annie Roi

# Equity, Justice, Progress, Science



*Dream?*

*Reality?*

# OA: Not an exception but a mainstream



National Institutes of Health  
*Turning Discovery Into Health*



Scientific Electronic Library Online



Organisation  
mondiale de la Santé

Octobre 2012 :

[Brussels declaration on Open Access](#)



wellcome trust



Ministry of Higher Education  
and Science



RESEARCH  
COUNCILS UK



# Un reminder: the two complimentary ways to OA

## Gold way

= Publish directly in Open Access  
+10,000 OA peer reviewed journals according to [www.doaj.org](http://www.doaj.org)

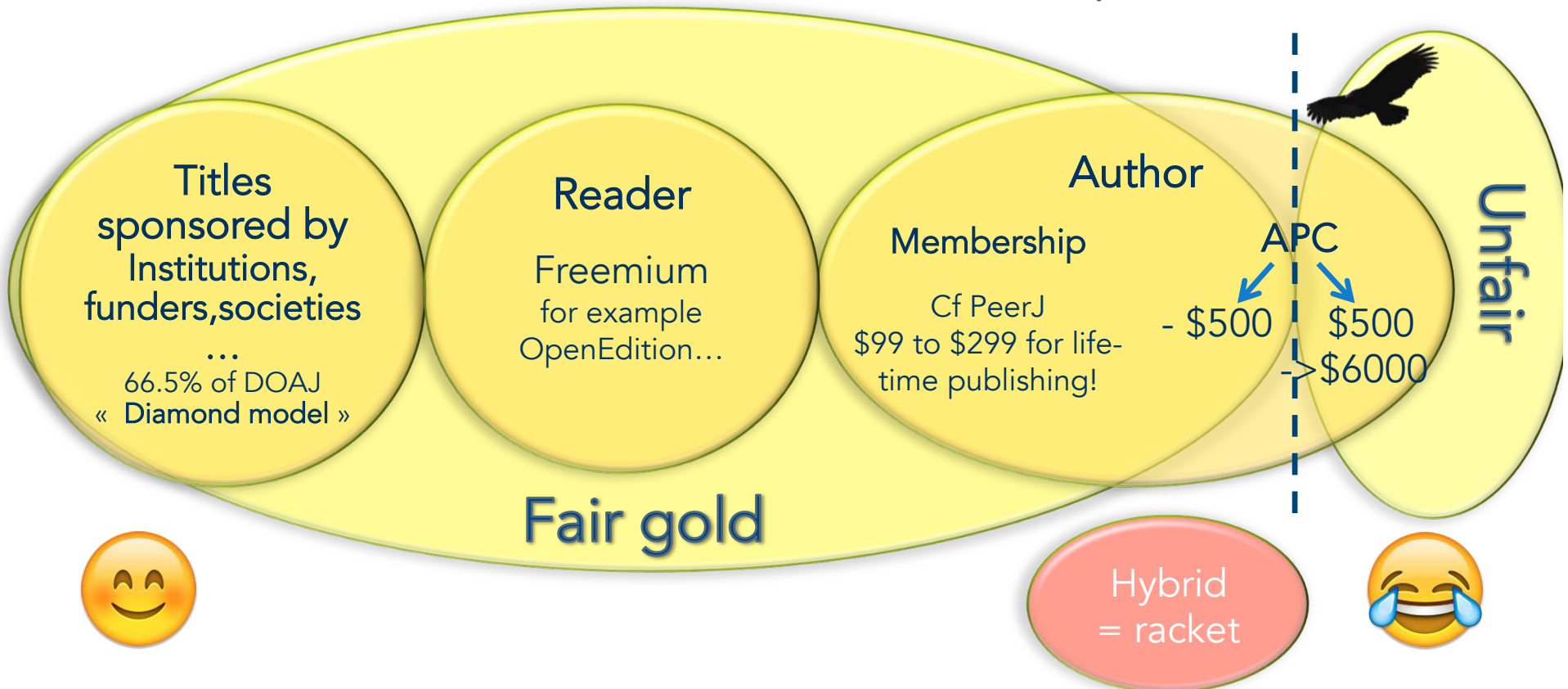
9.8% with IF (10.2% for traditional journals)

*(UlrichsWeb, December 2014)*



# Gold and fools gold...

Free for the reader, but who pays?







REVIEW FORM

Paper ID	IJ0350030
Paper Title	Get me off Your Fucking Mailing List

NOTE: 1. Excellent 2. Very Good 3. Good 4. Fair 5. Very Poor

1. Appropriateness to publish in IJACT

Option:	Excellent
---------	-----------

2. Accuracy

Option:	Excellent
---------	-----------

3. Innovation

Option:	Very Good
---------	-----------

4. Relevance

Option:	Very Good
---------	-----------

5. Presentation

Option:	Good
---------	------

6. Quality of writing

Option:	Very Good
---------	-----------

7. Application of paper as introductory study material for revolutionary new concepts

Option:	Very Good
---------	-----------

8. Overall Recommendation (Mark the right option):

Strongly Accepted	
Accepted	✓

Have a look on Jeffrey Beall' list  
<http://scholarlyoa.com/publishers/>  
669 predatory scholarly OA  
publishers (Dec 2014)



# Un reminder: the two complimentary ways to OA

## Green way

Feel free to publish in the journal you want!  
BUT deposit a copy of your full text in an Open Repository!

+2,700 in the world  
(thematics, institutional...)

<http://www.sherpa.ac.uk/romeo/>  
1,762 publishers policies:  
**75%** allow some form of self  
archiving (green way)

Keep your copyright!

Negotiate a licence instead a  
complete transfer of your rights !



# For example OA@ULG

*A longstanding story ...*



Initially a dream (in the early 2000s )  
shared by Rector Bernard Rentier  
and the libraries...

Turned into concrete reality for scholars

With concrete initiatives of the ULg Library  
network

# OA @ ULg

## Gold way:

**PoPuPS**: a portal and toolbox for diffusion of open access journals published by ULg members

- Since 2005
- 16 serials (+3 in preparation)
- <http://popups.ulg.ac.be>
- +400 downloads/day
- 2 serials obtained an IF since they are hosted on ORBi!

The screenshot shows the homepage of the PoPuPS portal. At the top, there is a navigation bar with 'Accueil' and 'Statistiques' links. The main header features the 'Université de Liège' logo and the 'PoPuPS' logo in a stylized blue font, with the subtitle 'Portail de Publication de Périodiques Scientifiques'. Below the header, there is a 'Présentation' section with introductory text. To the right, a blue box titled 'Liste des revues :' contains a list of journal titles with checkmarks, including 'Acta Stereologica', 'Annales de la Société géologique de Belgique', 'AnthropoChildren', 'Base', 'Bulletin d'Analyse Phénoménologique', 'Bulletin de la Société Géographique de Liège', 'Cahiers de la Société Royale des Sciences de Liège', 'Cahiers de Sciences politiques de l'ULg', 'Dissensus', 'Entomologie faunistique - Faunistic Entomology', 'Fédéralisme Régionalisme', 'Geologica Belgica', 'Lejeunia', 'Mémoires de la Société Royale des Sciences de Liège', and 'MethIS'. At the bottom, there are sections for 'Contact' (with contact information for Paul Thirion and Sylvain Danheux), 'Liens' (listing 'Université de Liège', 'Réseau des Bibliothèques', and 'Documentation'), and 'Informations' (stating 'PoPuPS est propulsé par Lodel (logiciel GPL)').

# OA @ ULg

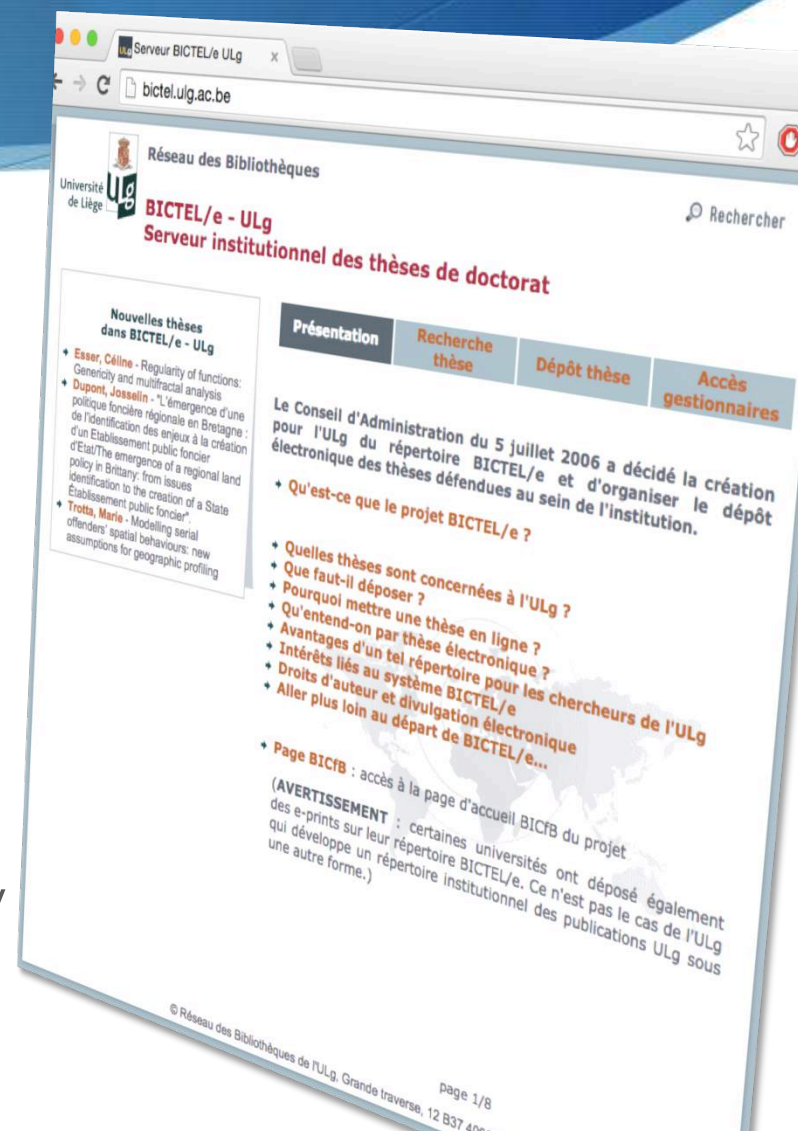
## Green way:

### BICTEL/e: a repository for PhD theses

- 🟡 since 2006
- 🟡 <http://bictel.ulg.ac.be>
- 🟡 +1000 theses
- 🟡 +63% with complete FT OA
- 🟡 +200 downloads/day

### ORBi: Open Repository and Bibliography

- 🟡 <http://orbi.ulg.ac.be/>





You are here: → ORBi → Home

Search ORBi:

Advanced search

- MyORBi

Browse ORBi by

- Author
- Title
- Issue year
- Journal title
- Document type
- Discipline

ORBi project

- Background
- Content
- Benefits and challenges
- Legal aspects
- Functions and services
- Team

The Open Access movement

- Overview
- Open Access at the ULg
- Webbibliography

ORBi is a project of



### ORBi and Open Access News

➤ All news



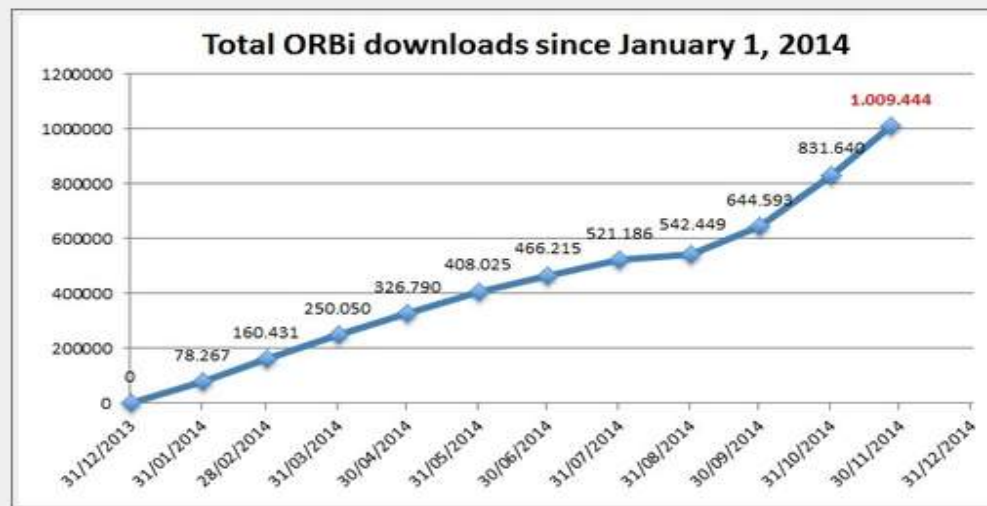
#### Who wants to gain downloads?

📅 28/11/2014

1 million. That is the number of downloads of the integral texts of ULg authors' publications from the institutional repository, ORBi (ULg), since January 1, 2014!

Since its launch in 2008 ORBi has enjoyed exponential growth. Whether it be in the number of deposits (115,500), or in the percentage of integral texts consulted (61.6%), but above all in terms of visibility.

If ORBi has already logged over 3 million downloads since its launch, 2014 is beating all the records, as over one million downloads have been recorded for just the first 11 months.



More ... ➤



#### The ABC of OA ~ information

📅 05/11/2014

"Où se situe l'Open Access par rapport au mode d'édition et de diffusion classique?", "Quels sont ses avantages et inconvénients?", "Vais-je perdre tous mes droits d'auteur si je dépose un article sur ORBi?" "Peux-tu et comment les..."

### Recently added

➔ Morsa Denis, Hanozin Emeline, De Pauw Edwin - Combined study of structures of lasso peptides upon heating

➔ Hanozin Emeline, Morsa Denis, De Pauw Edwin - Combined structural study of lasso peptides: Hydrogen/Deuterium exchange coupled with ion mobility spectrometry

➔ Olive Sébastien, Goujet Daniel, Lelièvre Hervé,... - The Growth of the Skull Roof Plates in *Arabosteus variabilis* (Acanthothoraci, Placodermi) from the Early Devonian Jauf Formation (Saudi Arabia): Preliminary Results

- Today
- Last 7 days

### In practice

115630 references in ORBi (71257 with full text)

More statistics

➤ First steps with ORBi : Practical information for the submitters

➤ Training sessions ORBi



# Open Repository and Bibliography

One system, two purposes:

- Complete institutional bibliography
- Open access repository

Deposit completely made by ULg authors themselves (\*)

- ORBi staff develops, improves the system, adds functionalities, informs, instructs, promotes...
- **BUT doesn't archive ANY reference**

*(\*) maybe helped by representatives*

**Main specificities**

Respect of each player (author, publisher, institution)

- Open Access 
- Restricted Access

→ request a print

"ULg Mandate"

*...or how to go beyond the anecdotal...*

# The "*ULg Mandate*": May 2007



Bernard Rentier, Rector ULg 2005-2014

# The "ULg Mandate": May 2007

- *ALL* scholarly publications since 2002 of *ALL* ULg members have to be deposited into ORBi
- All scholarly articles of all ULg members since 2002 have to be deposited **WITH FULL TEXT**

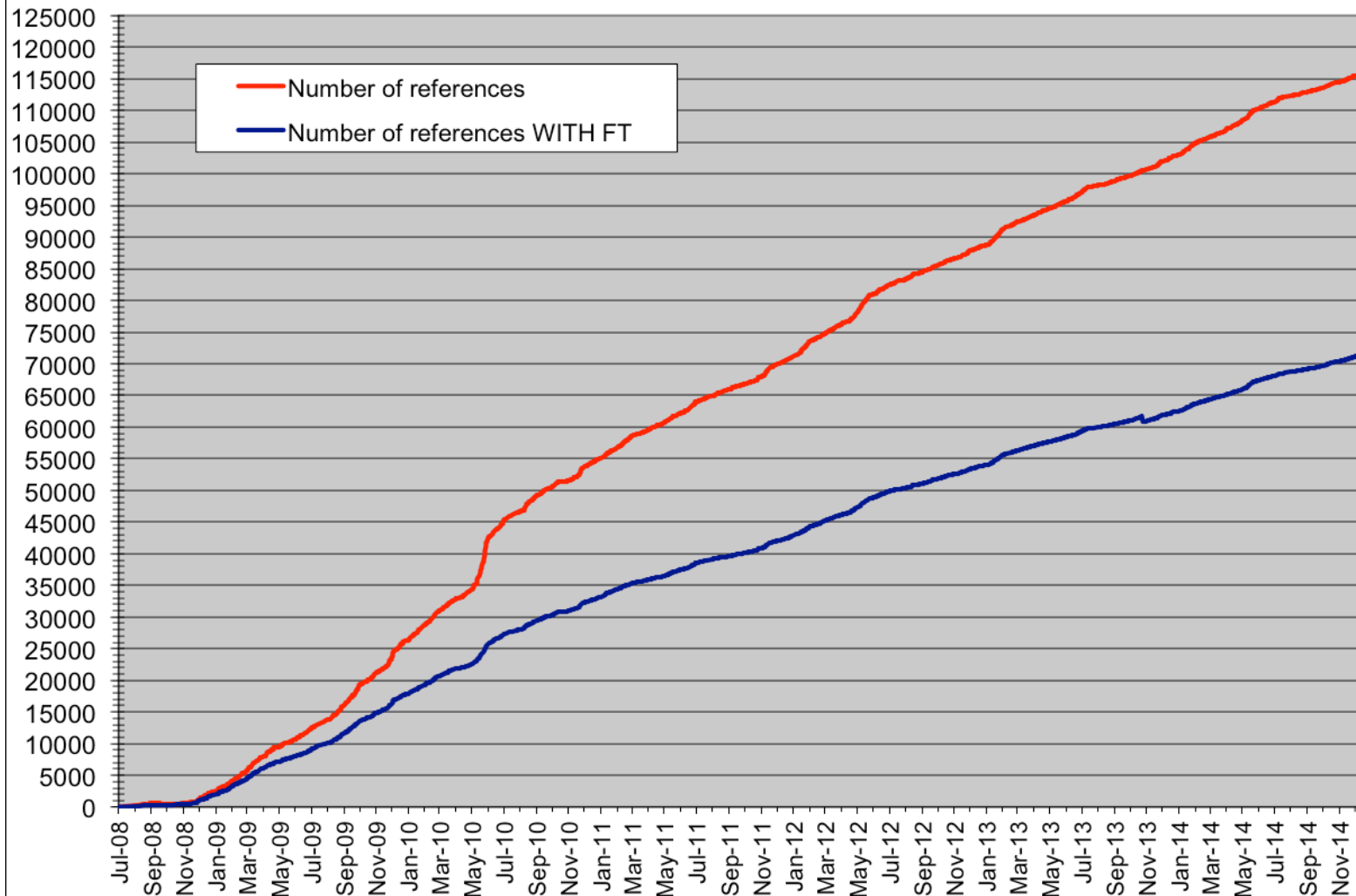
open or restricted access, according to the publisher's policy:  
ID/OA immediate deposit – optional access

- ◆ And a strong incentive for the scholars...

*Only references archived in ORBi were to be taken into account* for evaluations, appointments, promotions, budget allocations, grant applications etc.!

# Results after 6 years

Evolution of deposits on ORBi



**+115,700  
references**

**+61% with  
FT (+71,300)**



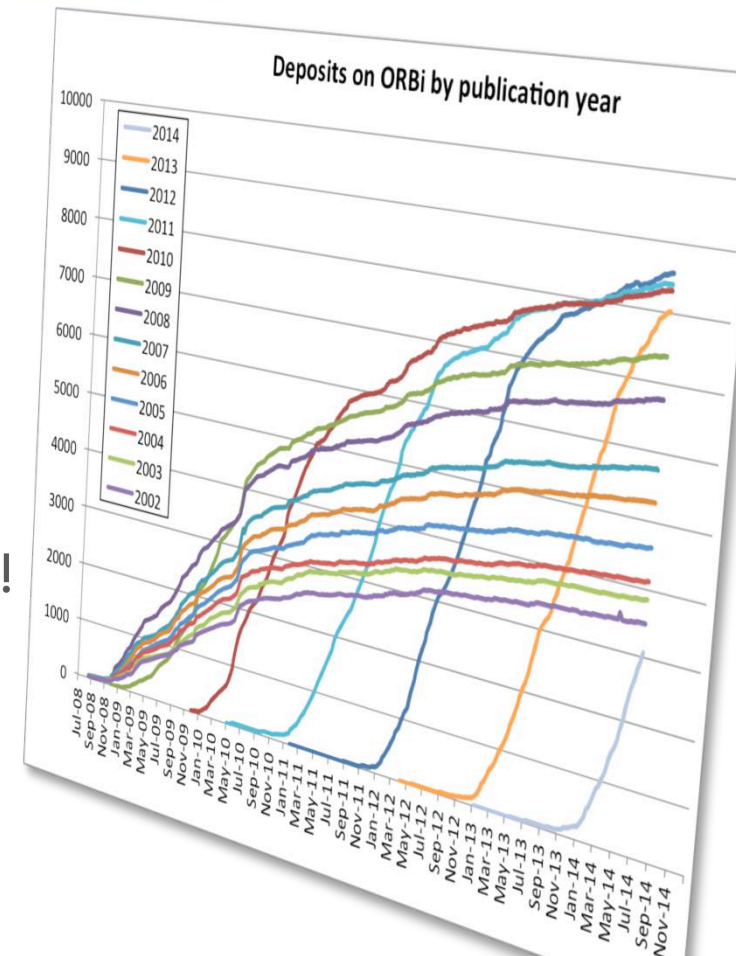
# Results

## How many publications/communications for ULg?

- Estimation before ORBi: 3000-3500/year (Scopus, WoS, Medline...)
- Observed in ORBi: +8500/year!!

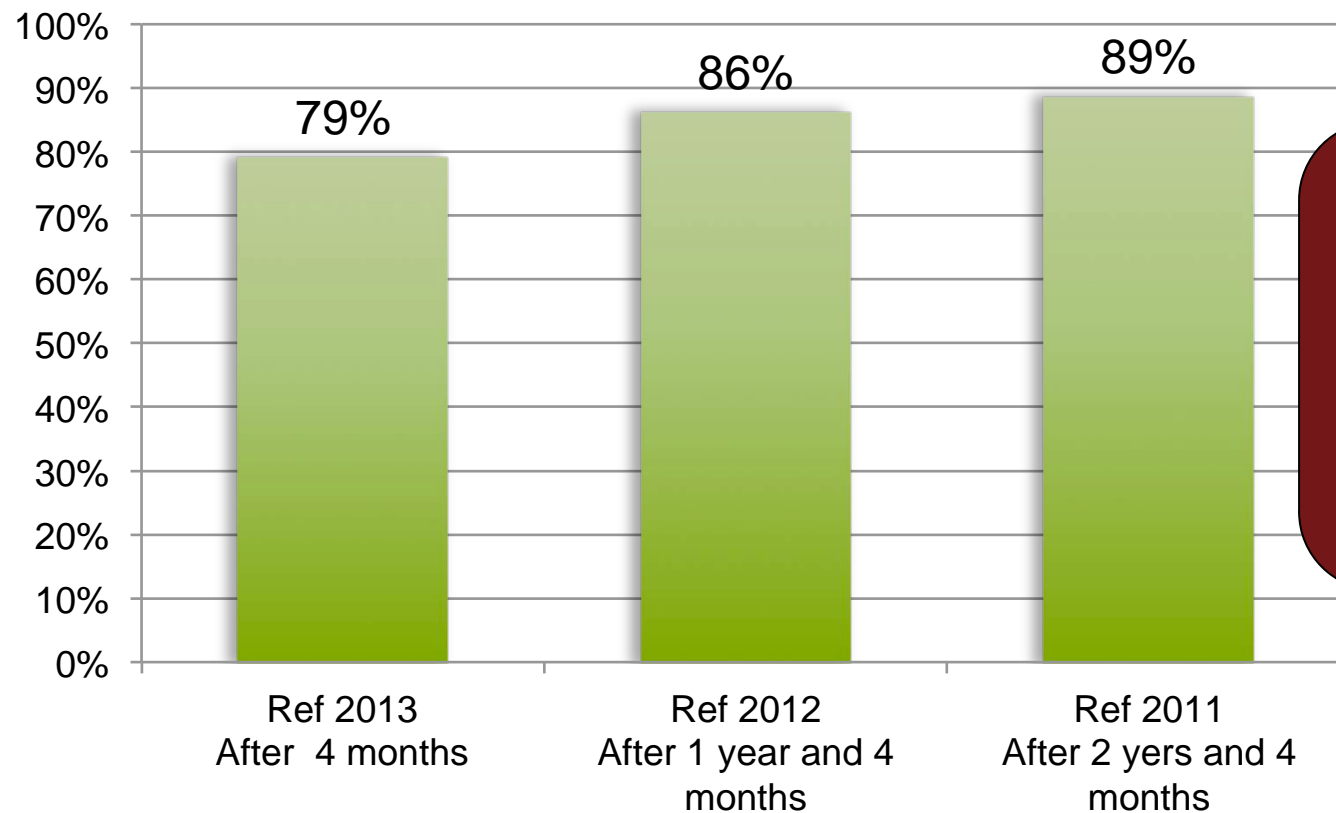
We publish much more than what we thought!

2.5 times more!



# Compliance rate

April 2014: Comparison WoS – ORBi for ULg publications 2011, 2012, 2013

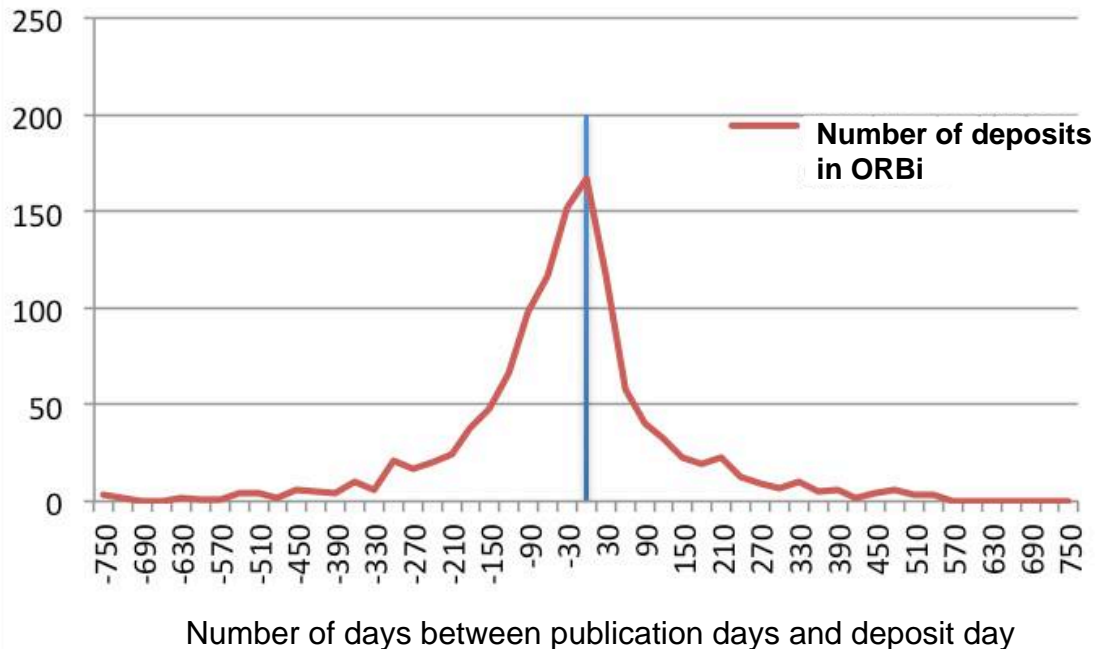


Other IR WITHOUT  
mandate? 5 to 20%

*S. Harnad et al (2013):  
UK IR  
4% with FT  
8.3% without FT*

# When do authors deposit?

Date of deposit in ORBi compared to the official publication date (year 2012)



54.3 % BEFORE  
13.9 % publication date  
31.8 % AFTER

In average:  
44.7 days BEFORE

# Only what is mandated?

	Scholarly articles	Other document types
Since 2002	100% with FT of wich 43% OA	49% with FT of wich 63% OA
Before 2002	51% with FT of wich 49% OA	25% with FT of wich 71% OA

## FT not mandated:

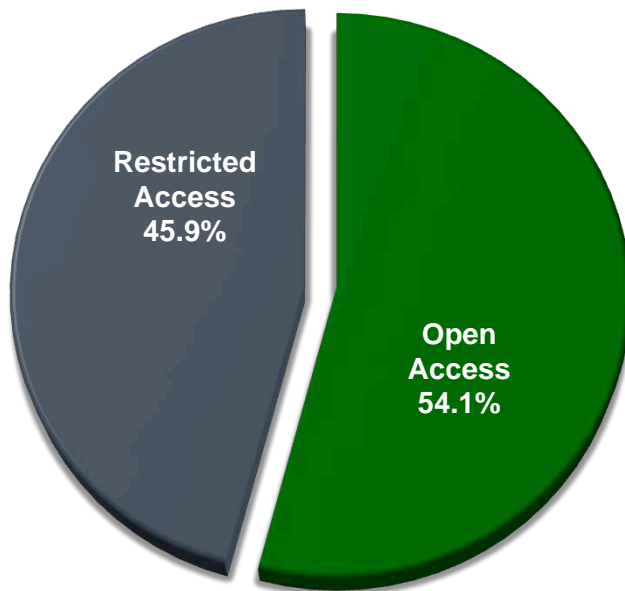
- For 54.2% of references

## OA not mandated:

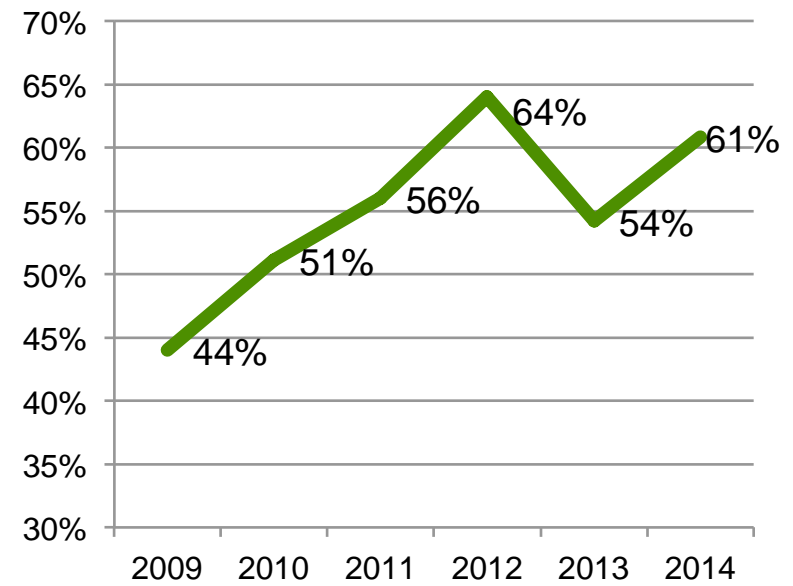
- ▶ For 33.2% of references



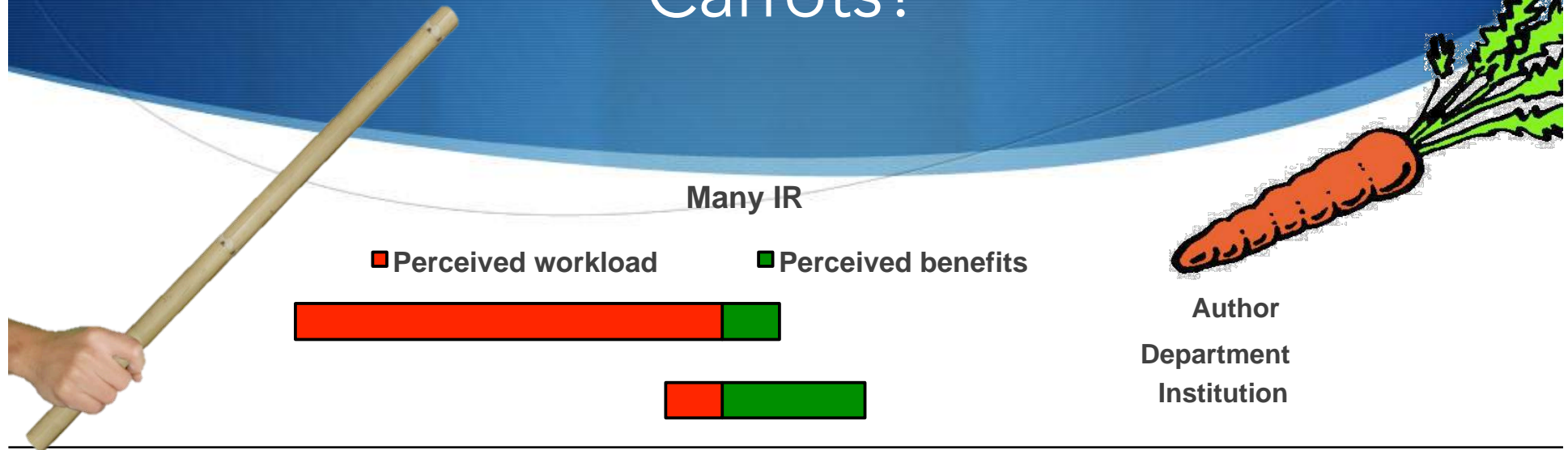
# Open Access?



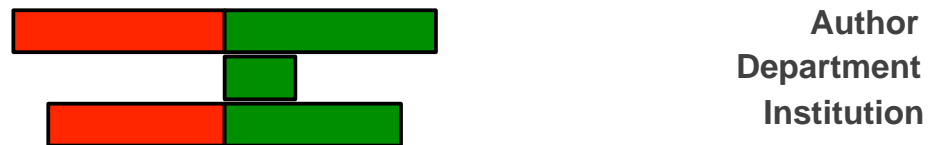
Open Access vs Restricted Access



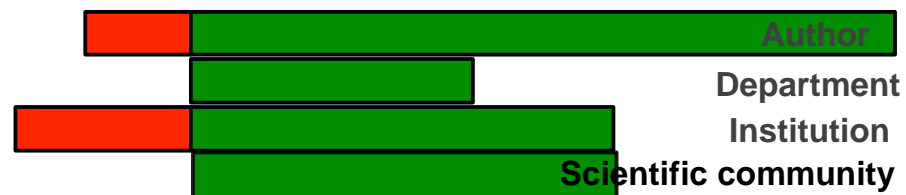
# Stick not sufficient to explain the success... Carrots?



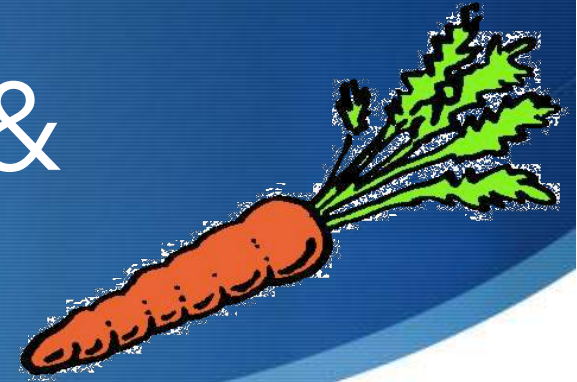
## ORBi now



## ORBi tomorrow...



# Many benefits & added values



- ◆ Longtime archiving
- ◆ New scientific contacts through requests a print system
- ◆ Easy widgets (inclusion of publication list in a WWW page...)
- ◆ Easy reports (CV, budget requests, FNRS...)
- ◆ Visibility
- ◆ ...



Staff directory

Student directory

Intranet directory

[ [Nouvelle recherche](#) ]

JÉRÔME Christine (Epse Alexandre)

[ [Publications scientifiques \(578\)](#) ]

[ [Fiche détaillée](#) ]

**Dépt / Unité :** [Département de chimie \(sciences\)](#) / Chimie des macromolécules et des matériaux organiques  
Faculté des Sciences / [Centre d'études et de rech. sur les macromolécules \(CERM\)](#)

**Adresse ULg :** Bât. B6 Chimie macromoléculaire et matériaux organiques  
allée de la Chimie 3  
4000 Liège 1  
Belgique

**Local :** 3/10

**Tél. ULg :** +32 4 3663491

**Fax ULg :** +32 4 3663497

**Courriel :** Cliquez sur la [fiche détaillée] pour voir l'adresse courriel

JEROME Elisabeth

[ [Publications scientifiques \(7\)](#) ]

[ [Fiche détaillée](#) ]

**Dépt / Unité :** Sciences et technologie de l'environnement / Physique des bio-systèmes

**Adresse ULg :** Bât. G1 Physique des bio-systèmes  
Avenue de la Faculté 8  
5030 Gembloux  
Belgique

**Courriel :** Cliquez sur la [fiche détaillée] pour voir l'adresse courriel



# Widget ORBi





## Welcome in oceanology

Département des Sciences et Gestion de l'Environnement Université de Liège (ULg, bât 86c) 8-8200 Sart Tilman (Belgique) Tel +32 4 366.33.39


**Publications from the laboratories of Oceanology & Systematic and animal diversity**

- Dominant amphipods of Posidonia oceanica seagrass meadows display considerable trophic diversity**  
 MICHEL, LOIC; DAUBY, PATRICK; GOBERT, SYLVIE; GRAEVE, MARTIN; NYSSSEN, FABIENNE; THELEN, NICOLAS; LEPOINT, GILLES  
 in *Marine Ecology* (In press)  
 Gut content examination and trophic markers (fatty acids, stable isotopes of C and N) were ...
- Multiscale variability of amphipod assemblages in Posidonia oceanica meadows**  
 in *Journal of Sea Research* (In press)  
 The study of spatial patterns is of ecological importance in order to understand the causes of the ...
- Isotopic tracing of sediment components that are assimilated by epibiotic juveniles of Holothuria scabra (Holothuroidea)**  
 PLOTTEAU, THOMAS; LEPOINT, GILLES; LAVITRA, THIERY; ECKHAUT, IGOR  
 in *Journal of the Marine Biological Association of the United Kingdom* (In press)  
 Despite H. scabra's wide distribution and status as one of the best candidates for sustaining the ...
- Comparative biogeochemistry-ecosystem-human interactions on dynamic continental margins**  
 LEVIN, LISA A.; LIU, KON-KEE; KAY-CRISTIAN, EMEIS; BREITBURG, DENISE L.; CLOERN, JAMES; DEUTSCH, CURTIS; GUAN, MICHELE; GOFFART, ANNE; HOFMANN, EILEEN E.; LACHKAR, ZOUHAR; LIMBURG, KARIN; LIU, SU-MEI; MONTES, ENRIQUE; NAIQI, WAJUH; RAGUENEAU, OLIVIER; RABOUILLE, CHRISTOPHE; KUMAR SANKAR, SANTOSH; SWINNEY, DENNIS P.; WASSMAN, PAUL; WISHNER, KAREN F.  
 in *Journal of Marine Systems* (2015), 141  
 The ocean's continental margins face strong and rapid change, forced by a combination of direct ...
- Assessment of contaminant levels and trophic relations at a World Heritage Site by measurements in a characteristic shorebird species**  
 SCHWENMER, PHILIPP; COVACI, ADRIAN; DAS, KRISHNA; LEPOINT, GILLES; ADLERO, SVEN; GARTHE, STEFAN  
 in *Environmental Research* (2015), 136  
 The River Elbe is responsible for influges of contaminants into the Wadden Sea World Heritage Site ...

Webdesign : Joseph Schnitzler & Loïc Michel

[HOME](#) | [RESEARCH](#) | [STAFF](#) | [TEACHING](#)

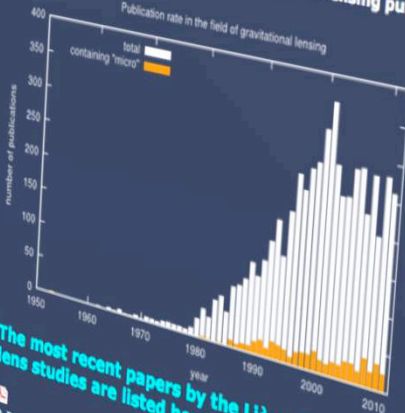
## Gravitational Lenses



In 1979, three British-American astronomers, Walsh, Carswell and Weymann discovered by chance in the sky an example of a gravitational lens mirage, an illusion at the cosmic scale, which consists of two images of a background quasar (an active galactic nucleus), formed by a gravitational lens in the foreground. The formation of cosmic mirages had been predicted within the general relativity developed in 1917. According to this theory, E predicts that light rays emitted by a distant background source are deflected near a heavy and compact foreground massive object (the lens) located along the line of sight, like a star, a galaxy or even a cluster of galaxies. There large concentration of mass may act as a kind of lens, called a gravitational lens.

A simple educational experience makes it possible to simulate such effects (see below). Gravitational lens simulation didactical experiment designed by J. Surdej (Department of Astrophysics, Geophysics and Oceanography, University) for RéjouSciences (Faculty of Sciences, ULg) To buy a lens - click here!  
 You can find more informations on the DIDACTICAL EXPERIMENT ON GRAVITATIONAL LENSING page  
 Introduction to the theory of gravitational lensing  
 Lectures No 1 - 3 (pdf files + videos:mov, avi) given by Jean Surdej (In french):  
 Part 1, Part 2, Part 3

**Number of papers related to gravitational lensing published per year, during the past 50 years.**



The most recent papers by the Liège AEOS group dedicated to gravitational lens studies are listed hereafter:

- D. Defrère, O. Abill, C. Harot, P. Riaud, A. Magette, L. Marion, O. Wertz et al. "Observing the Sun with micro-interferometric devices: a didactic experiment." In *Improving the Performances of Current Optical Interferometers & Future Designs*. Edited by J. Surdej, H. Le Couoller, and L. Arnold. 2014. 87-92.
- Y. Tagawa, J.-Y. Choi, R. A. Street, C. Han, V. Bozza, A. Gould, M. Dominik et al. "Use of the Fourier transform to derive an analysis of microlensing event OGLE-2012-BLG-0406." *Astrophysical Journal* 782 (février 2014).
- O. Wertz and J. Surdej. "Use of the Fourier transform to derive an analysis of microlensing event OGLE-2012-BLG-0406." *Astrophysical Journal* 782 (février 2014).
- J.-Y. Choi, C. Han, A. Gould, M. Dominik et al. "Observing the Sun with micro-interferometric devices: a didactic experiment." *Journal of Astronomical Society of India* 35 (2014).

## Publications and communications of Gilles Lepoint

### Legend

**Bibliometric indicators linked to the journal** (for those whose ISSN has been indicated by the author)

- **IF = Impact factor** Thomson ISI. Are indicated : IF of the year of publication and IF of the last edition of JCR (last). \* ? \* if not known by ORBI yet ; \* - \* if non-existent.
- **IFS** : Idem as IF but for a 5 year period (new indicator since 2009).
- **EigenF = EigenFactor** (see : <http://www.eigenfactor.org/>).
- **Article Infl. = Article Influence** : EigenFactor divided by the number of articles published in the journal.

\* More information ? <http://orbi.ulg.ac.be/rot#rev>



**Bibliometric indicators linked to the article**

- **ORBI viewed** = total number of visualizations of a reference on ORBI (of which X internally within the ULg).
- **ORBI downloaded** = total number of downloads of the full text via ORBI, including requests copy.
- **SCOPUS®** = number of citations picked up by SCOPUS®.

\* More information ? <http://orbi.ulg.ac.be/rot#art>

(Warning : According to disciplines, some bibliometric indicators may not be relevant)


  , etc: full text of the document available in Open Access

  , etc: full text of the document available in restricted access

**Peer reviewed (verified by ORBI)** : the information is available in the ORBI journals database

## 1. Dissertations and Theses

### 1.b. Doctoral thesis

 Lepoint, G. (2001). *Compétition pour l'azote inorganique entre le pelagos et le benthos dans un écosystème côtier oligotrophe. Effets sur la dynamique de l'écosystème*. Unpublished doctoral thesis, ULg, Liège, Belgique.

<http://hdl.handle.net/2268/27264>

Jury: Bouquegneau, J.-M. (Promotor), Dauby, P. (Promotor), Ronday, F., Bussers, J.-C., Demoulin, V., Eyskens, M., & Mateo, M.-A.

ORBI viewed: 92 (13 ULg) ; downloaded: 252 (18 ULg) — SCOPUS®: -

### 1.c. Second cycle dissertations (licence, master, DES, DEA)

Lepoint, G. (1994). *Distribution spatio-temporelle des épiphytes des feuilles de Posidonia oceanica dans la baie de la Revellata (Corsica). Liens trophiques avec le poisson sparidé Sarpa salpa*. Unpublished master thesis, ULg, Liège, Belgique.

<http://hdl.handle.net/2268/27447>

Jury: Bouquegneau, J.-M. (Promotor), Havelange, S. (Promotor), & Dauby, P. (Promotor).

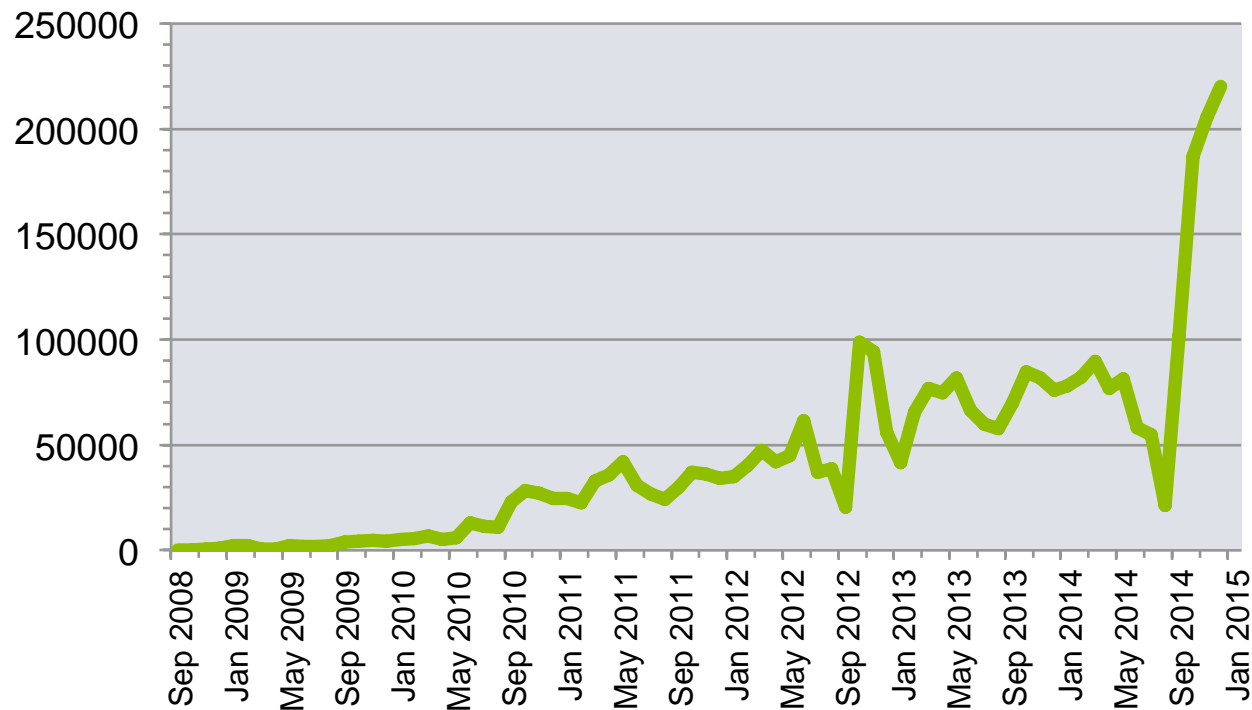
ORBI viewed: 26 (6 ULg)

## 3. Articles in peer reviewed academic journals

3.1. With an international target audience

# Benefits for the author: Visibility

Evolution of downloads/month from ORBi



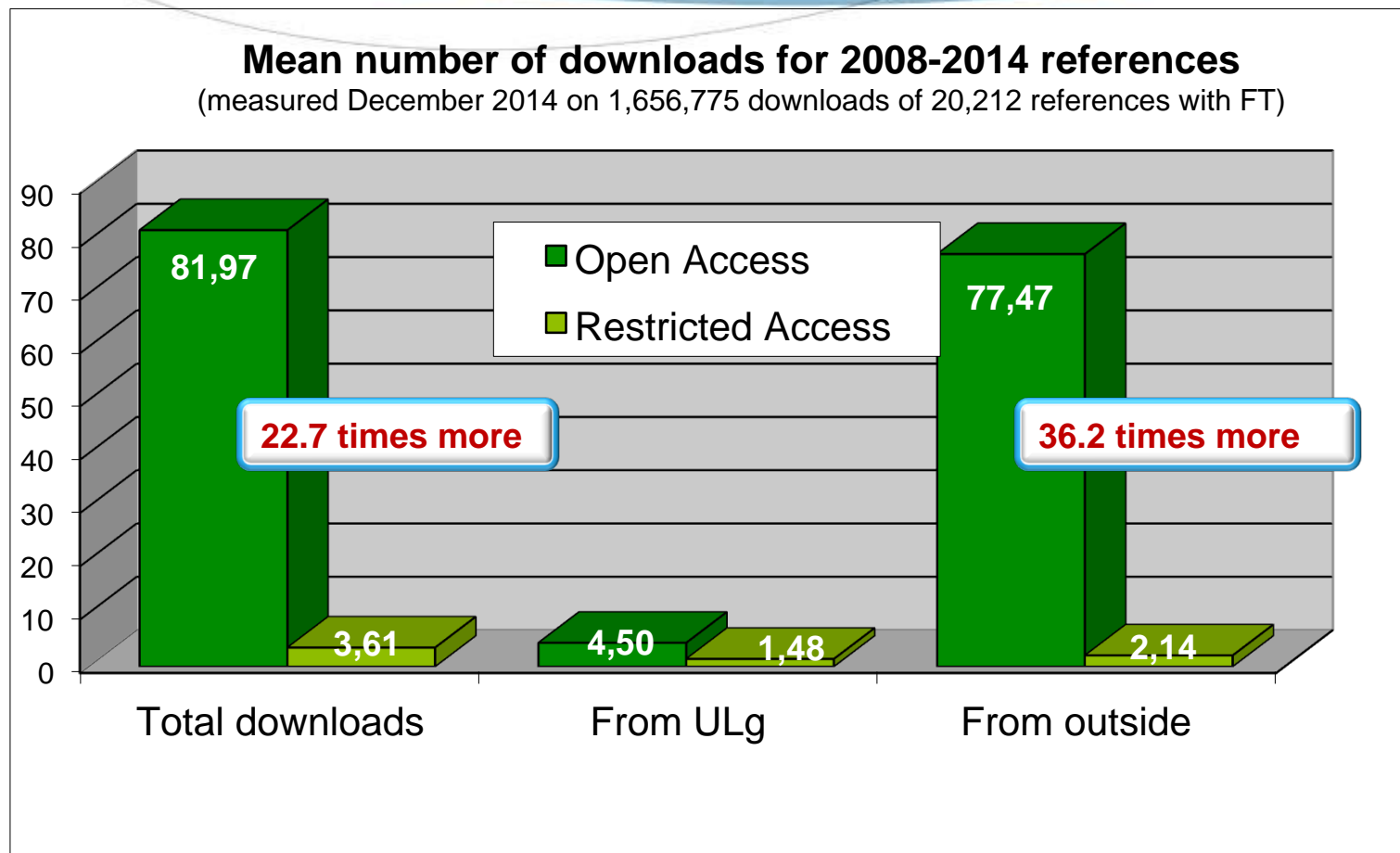
Now: +7000 downloads/  
day

+1 million since 1/1/2014

Excluding spiders et  
bots !

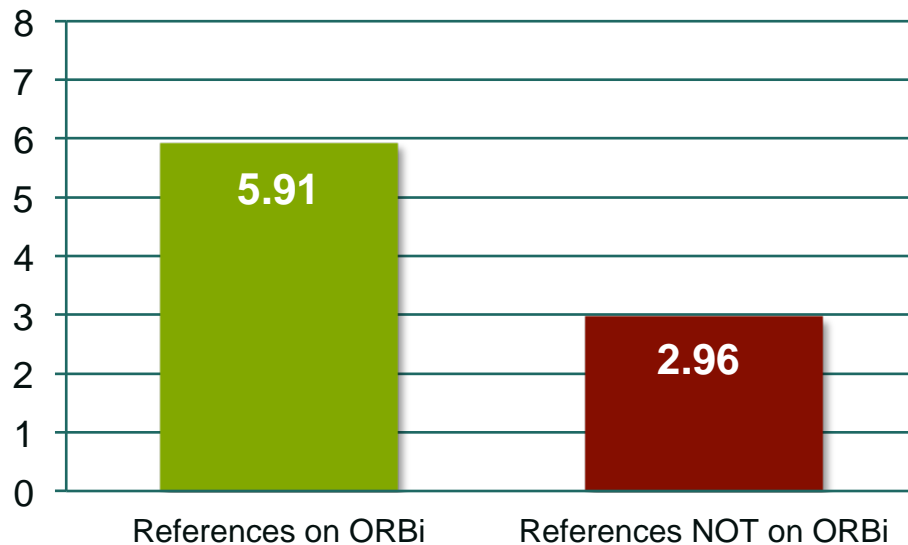
Google effect!

# Benefits for the author: Visibility

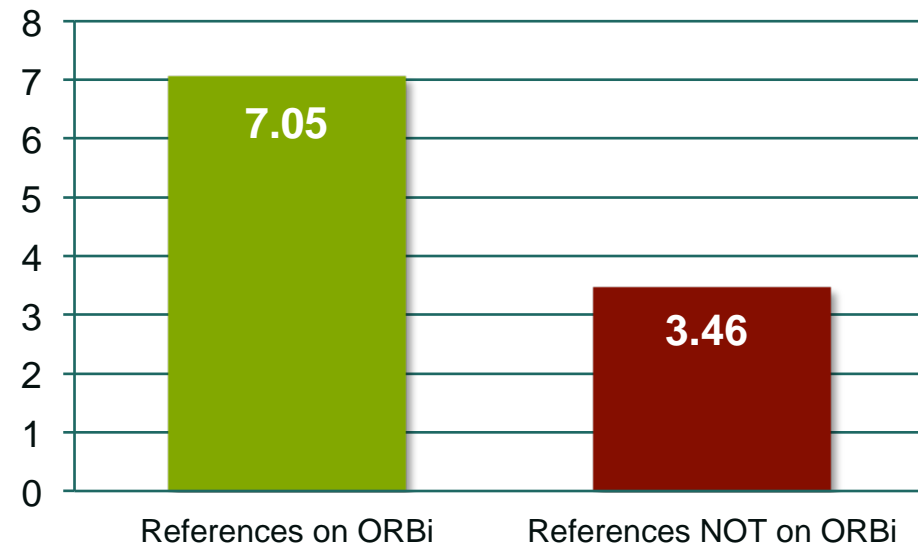


# Benefits for the author: Citations

Mean number of citations for a randomized sample of 2009 ULg references on Scopus  
(n=351; data 2011)



Mean number of citations for ALL 2007-2011 ULg references on WoS  
(n=7673; data January 2012)



According to WoS: 2007-2011 references never cited

- Available on ORBi: 28.9 %
- NOT available on ORBi: 55.8 %

# The schizophrenia of the researcher...

*I do not have access for free to all of the papers I need!!?*

*But where are the police?*

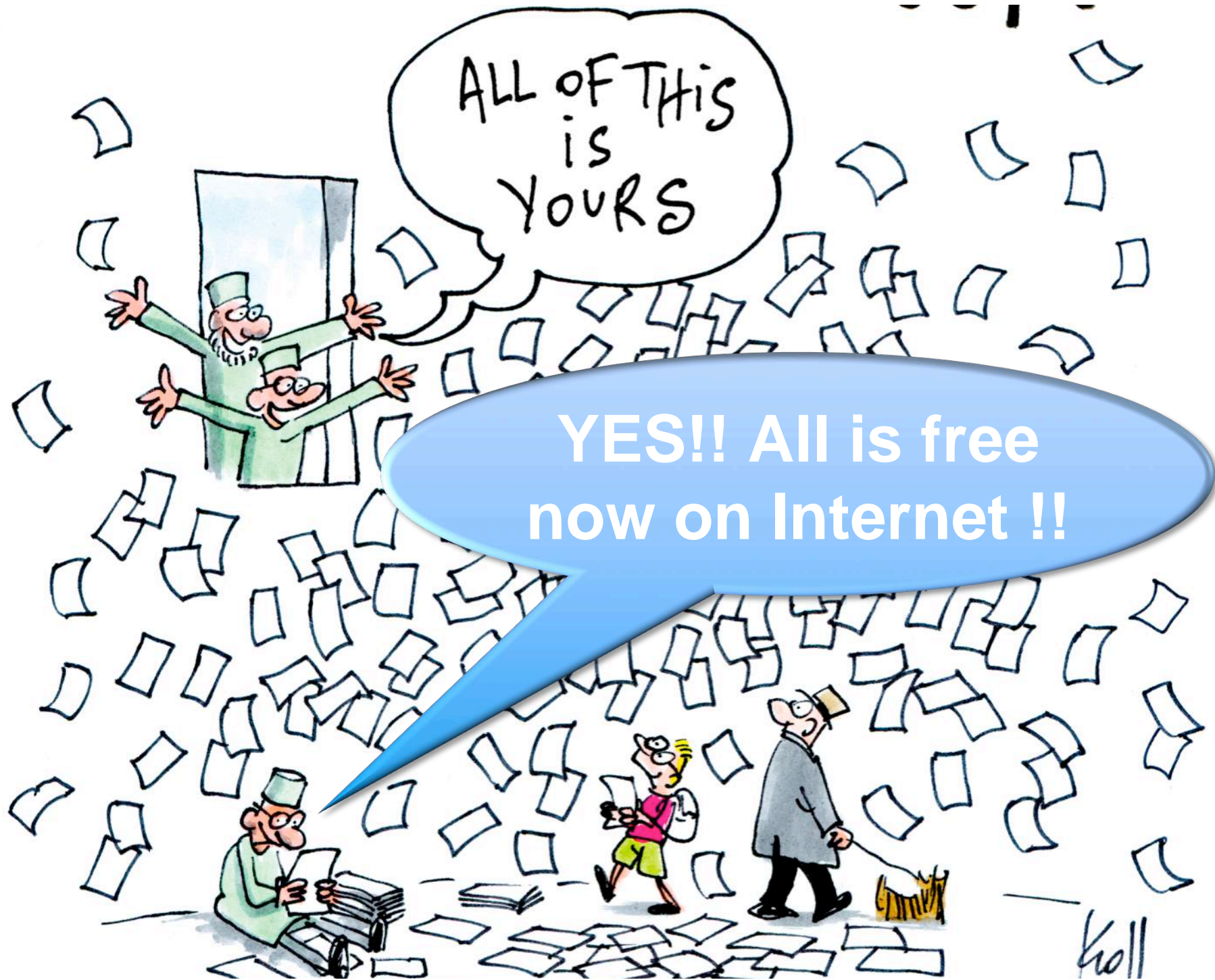
*To give free access to my papers?*

*It's a joke I presume??*



**DON'T HIDE  
YOUR  
RESEARCH  
BEHIND  
A PAYWALL.**





**YES!! All is free  
now on Internet !!**



A close-up photograph of a person's hands typing on a laptop keyboard. The person is wearing a blue shirt, a black watch on their left wrist, and a ring on their left hand. The background is blurred, showing other people in a dimly lit room. The text is overlaid on the top left of the image.

...Thank you for your attention

<http://orbi.ulg.ac.be>  
[orbi@misc.ulg.ac.be](mailto:orbi@misc.ulg.ac.be)  
🐦 @ORBi\_ULg

[Paul.Thirion@ulg.ac.be](mailto:Paul.Thirion@ulg.ac.be)  
🐦 @PaulThir