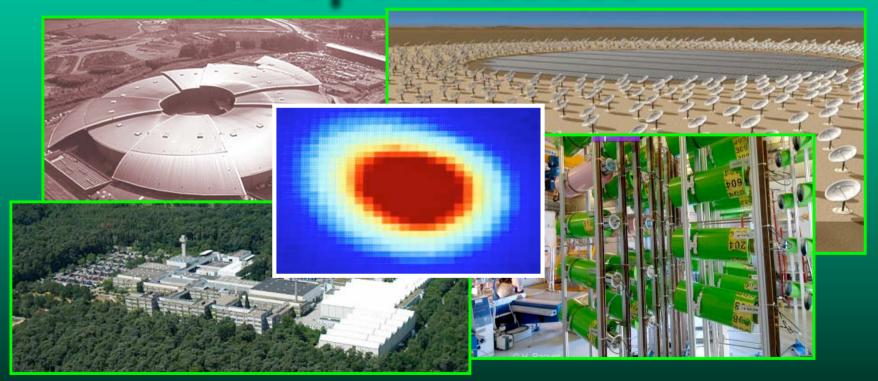


# Evaluation: review on criteria and methodology for defining the open access



#### **Giorgio Margaritondo**

Ecole Polytechnique Fédérale de Lausanne (EPFL)





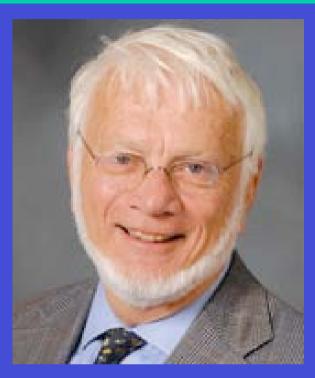
# We start from excellent foundations:

- 1. The long, practical and positive experience with open access in existing European infrastructures
- 2. A large collection of European success stories
- 3. Europe in this case is ahead of the rest of the world









The 2009 success story for open access at large (mostly European) facilities:

Nobel Prize in Chemistry for Ramakrishnan, Yonath and Steitz



# The specific case of synchrotrons and FELs:



Three decades of EC-supported cooperation and coordination with open access

Byproduct: solid and extensive data on the impact of open access:

**IA-SFS** (entire duration):

Proposals eligible for support: 7,954

Selected: 3,441

Rejected: 4,513

Only 43% accepted

proposals (based on

merit) after the filters

to obtain other types

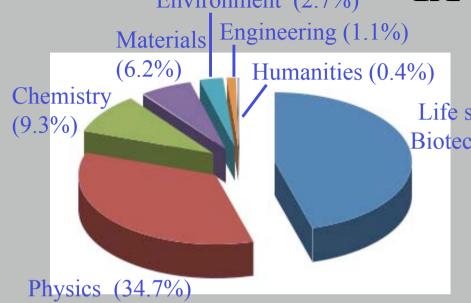
of funding

#### ⇒ A VERY RIGOROUS AND FAIR SELECTION





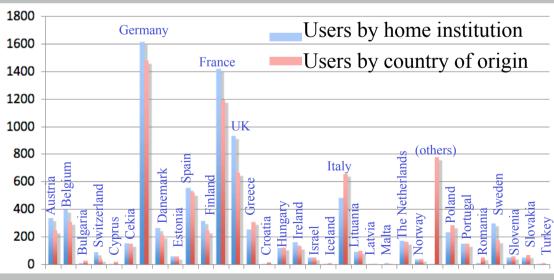




Life sciences & Biotech (45.6%)

⇒ A BROAD
INTERDISCIPLINARY
IMPACT

⇒ AN IMPORTANT
ROLE THROUGHOUT
EUROPE... AND
BEYOND







# IA-SFS I3: summary of the 5-year quantitative impact of open access to synchrotrons and free electron lasers in Europe

- A consortium of 15 national facilities (synchrotrons and free electron lasers) plus ESRF, including all major European players in the field
- The largest network of research facilities in the world
- Support for 8343 users (9437 access trips) from all over Europe
- Support for 3441 projects in many different disciplines
- Total funding: 27 million Euro, of which 19.35 (72%) for transnational open access -- 2 kEuro per access trip





### IA-SFS I3: examples of the special positive impact of open access

- Of the supported users, >45% were young researchers (≤35 years of age)
- And 30% were women
- We supported for three years the work of the team of the 2009 Nobel laureate Venki Ramakrishnan.
- ⇒OPEN ACCESS IS PARTICULARLY IMPORTANT FOR YOUNG SCIENTISTS, WOMEN AND RESEARCHERS FROM LESS-FAVORED COUNTRIES
- ⇒BUT TO BE EFFECTIVE IT MUST BE PROACTIVE AND FINANCIALLY SUPPORTED: ACCESS OPEN ONLY "IN PRINCIPLE" DOES NOT HELP!

Cowardice asks the question - is it safe?

Expediency asks the question - is it politic?

Vanity asks the question fis it politic?

But conscience asks the question - is it politic?

And the re-stress what must take a position that is peither fafe; nor positic, nor popular, outle bet aby louist is right.

Dr. Martin Luther King, Jr.





## Generalizing the vision of Open Access: "WHY OPEN ACCESS?"

#### Three key reasons, one European motivation:

- 1. Open access boosts the scientific and technological return of the large investments in central facilities
- 2. Transnational open access enables scientists from lessfavored countries to perform top-level research without emigration and brain drain
- 3. Open access enhances the research opportunities of women and young researchers
- Europe is more advanced than other parts of the world in providing "proactive" open access to its facilities: it is at the top, let us keep it there!



#### "HOW TO IMPLEMENT OPEN ACCESS?": <u>5 principles</u>

- 1. Selection based on merit, assessed by peer review
- 2. "Proactive" open access: merit-selected scientists must receive financial support and local technical assistance otherwise open access is just a virtual notion
- 3. Hosting facilities providing open access must receive adequate financial support for this task
- 4. Open access must be transnational, within and beyond Europe
- 5. Effective open access requires long-term planning and timely funding and implementation of new state-of-the-art facilities



### "WHAT SHOULD BE AVOIDED IN OPEN ACCESS?"

- 1. User fees must be rejected: the corresponding overheads are nothing more than a waste of money
- 2. Open access should be timely and flexible, avoiding needless red tape. Innovation should be stimulated, not discouraged
- 3. Nothing can ever justify the use of national quotas in open access
- 4. Any "hidden way" to sabotage open access should be rejected such as the infamous "user tickets"



#### "HOW CAN WE IMPROVE OPEN ACCESS?"

- 1. Targeted funding for young investigators and researchers from less-favored countries
- 2. Coordinated handling of access requests by multiple facilities (e.g., "one request for all European synchrotrons")
- 3. More flexibility with short waiting time in special cases
- 4. Expanded use of "block" allocations of open access (e.g., blocks of beamtime at synchrotrons for certain domains)
- 5. Better infrastructure for remote-control experiments
- 6. Better communications with political leaders, the public and <u>potential users</u>, in particular from "new" domains



#### (PFU

#### "WHAT WENT WRONG SO FAR"?

- Open access is a clear success story for Europe. Then, why is the financial support for open access becoming increasingly difficult to obtain?
- Why are new communities (e.g., medical researchers) so difficult to convince about the notion of open access?
- Why should we often hide open transnational access to politicians rather than being proud of its smashing success?

#### ...and, above all:

- Elettra is a typical example valid for all similar facilities
- More than 50% of its operation provides open access to transnational users
- The open-access-related contributions from Europe are less than 1.7% of its operating budget





#### Open Access in Europe: Good reasons for being optimistic:

- The difficulties notwithstanding, open access is steadily increasing We need a new
- National bigotries and barriers are progressively decreasing
- · Users are generall Europeanl, the system is working
- New generation of the efficiency property and prepared to use centralized facilities that the "old guard"
- The case for open access is so clear that is becoming selfevident

