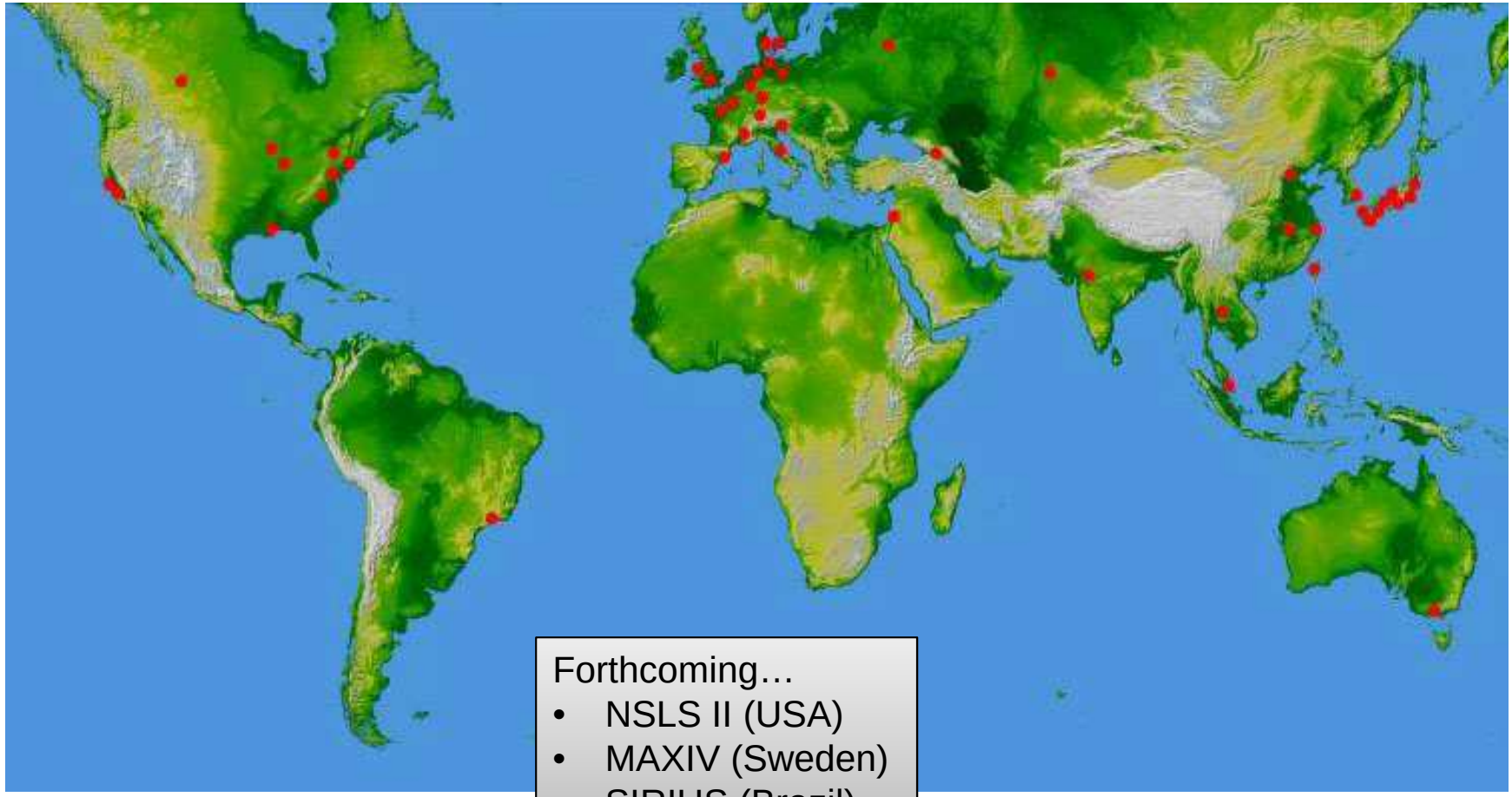
A snapshot introduction

> 50 RUNNING SYNCHROTRON FACILITIES WORLDWIDE



Forthcoming…
- NSLS II (USA)
- MAXIV (Sweden)
- SIRIUS (Brazil)

The European Synchrotron | ESRF

THE EUROPEAN SCENE










European Synchrotron | ESRF

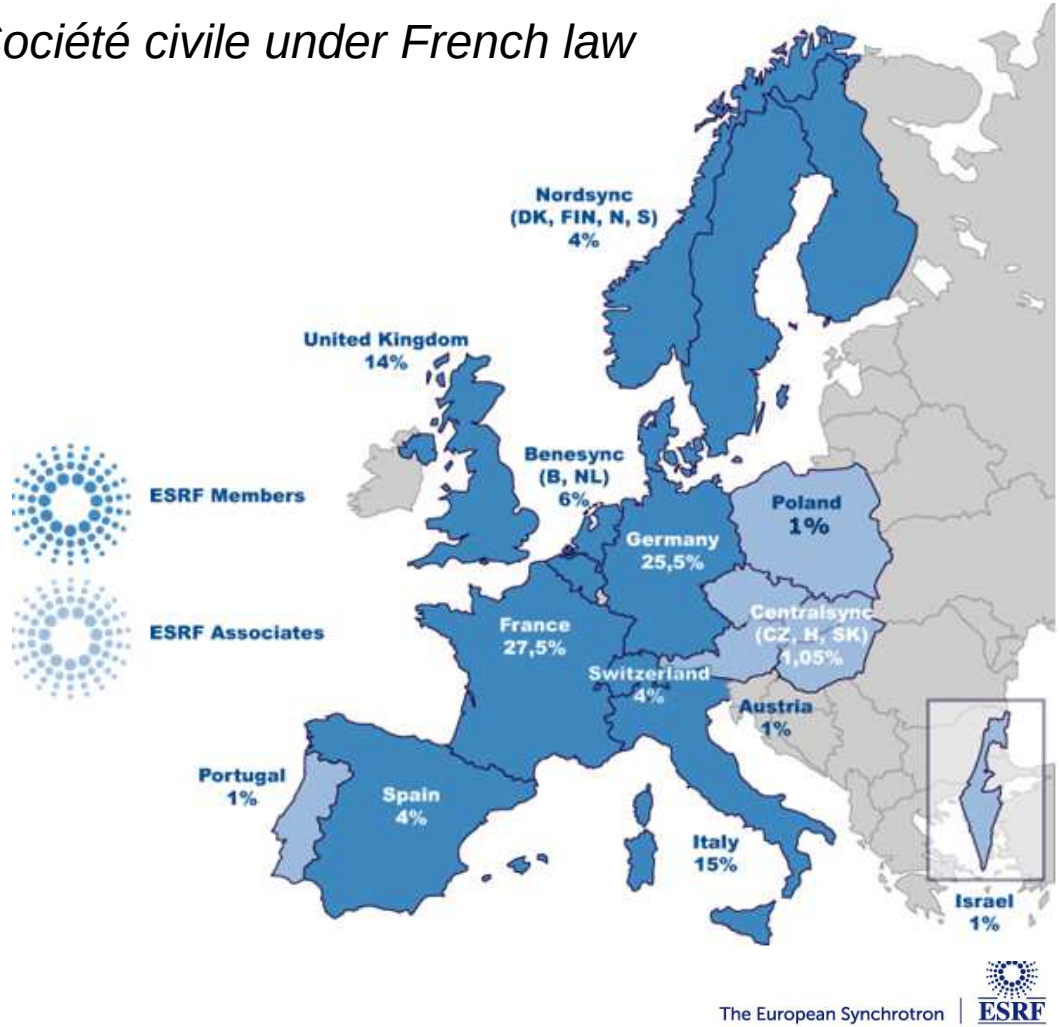
SOME MILESTONES

- **2013** - South Africa joins ESRF (20 countries support today the ESRF)
- **2008** - ESRF Upgrade Programme 2009 - 2018 launched.
- **1998** - Construction period ends. 40 beamlines are made available to users.
- **1994** - The ESRF opens its doors to users, offering 15 operational beamlines.
- **1992** - First electron beam in the ring and first X-ray beam in a beamline.
- **1989** - The ESRF company as a *société civile de droit français*.
- **1988** - Start of the construction with 12 countries supporting the project.
- **1987** - Foundation phase report.
- **1985** - Grenoble chosen as the future location of the ESRF.
- **1975** - first meeting - European Science Foundation.

MEMBERS & ASSOCIATES

27.5%	France
25.5%	Germany
15%	Italy
14%	United Kingdom
6%	Russian Federation
4%	Spain
4%	Switzerland
6%	Benesync (BE, NL)
4%	Nordsync (DK, SF, NO, SE)
1%	Portugal
1%	Israel
1.3%	Austria
1%	Poland
1.05%	Centralsync ((CZ, HU, SV)
1%	India
0.3%	South Africa

Société civile under French law



MISSIONS AS A USERS' FACILITY

international research institute for cutting-edge science with photons:

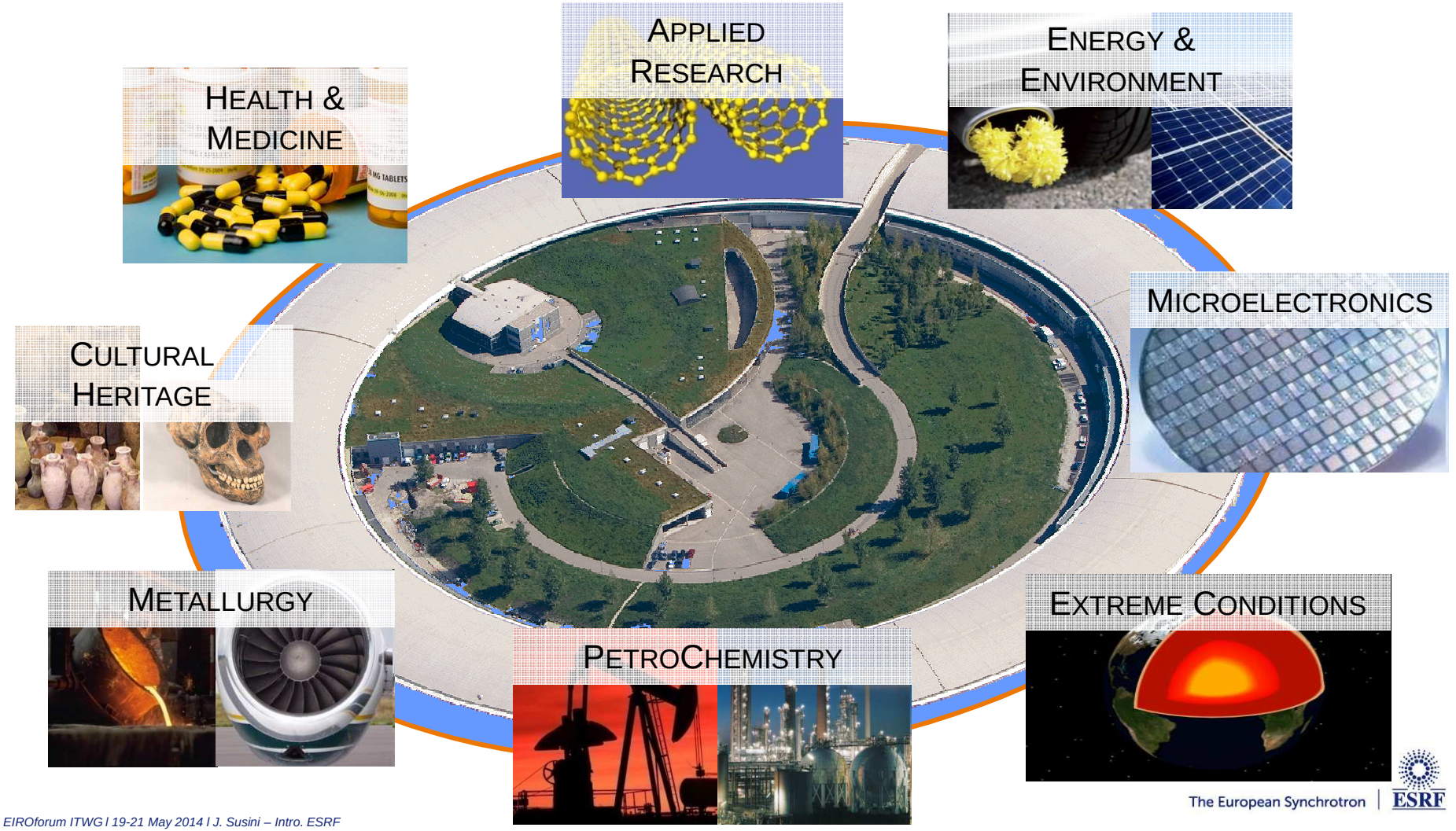
Discovery of the
structure and dynamics of our complex world, down to the single atom.

Scientific excellence. Access to experiment time is competitive, and selection of experiments is guided by external review.

Accessibility. The use of the ESRF is free of charge for all academic research. Close to a quarter of the academic research at the ESRF involves industrial partners. Industrial use of our facilities and expertise, including full intellectual property protection, is possible.

Openness. The results of academic research at the ESRF are always published, and the knowledge, skills and technologies developed at the ESRF are shared with the member countries and associates.

A WIDE RANGE OF APPLICATIONS IN PHOTON SCIENCE



The European Synchrotron | ESRF

ESRF FACTS AND FIGURES

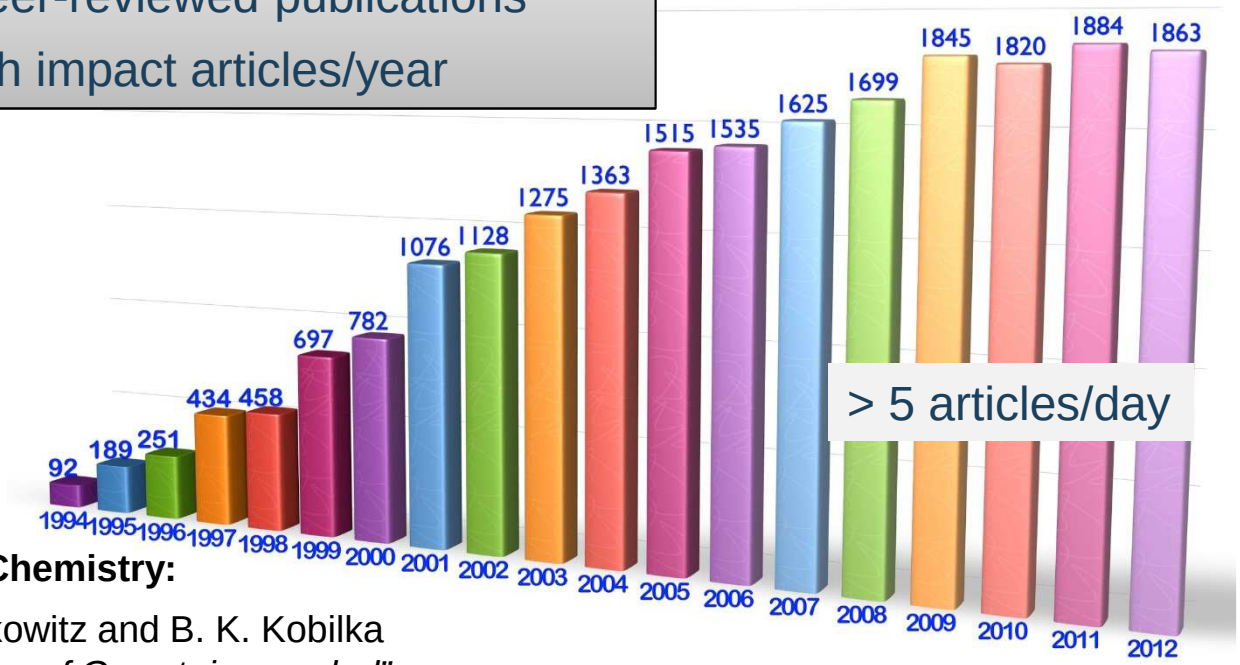
- 20 years of operation
  - 98.5% beam avaibility
  - 24h/24h & 6days/week
  - 1500 Experimental sessions/year
- ~ 42 Synchrotron Radiation Beamlines
- ~ 85 M€ Annual Budget (58% Personnel, 22% Operation, 20% Investment)
- ~ 650 staff (>30 nationalities)
- ~ 5000 Users/year (> 7000 visits)
- ~ 2000 Proposals/year
- ~ 1900 Refereed Scientific Publications/year from work at ESRF

The European Synchrotron | ESRF

SCIENTIFIC EXCELLENCE AND PRODUCTION

over 1994-2012 period

- 21 545 peer-reviewed publications
- > 200 high impact articles/year

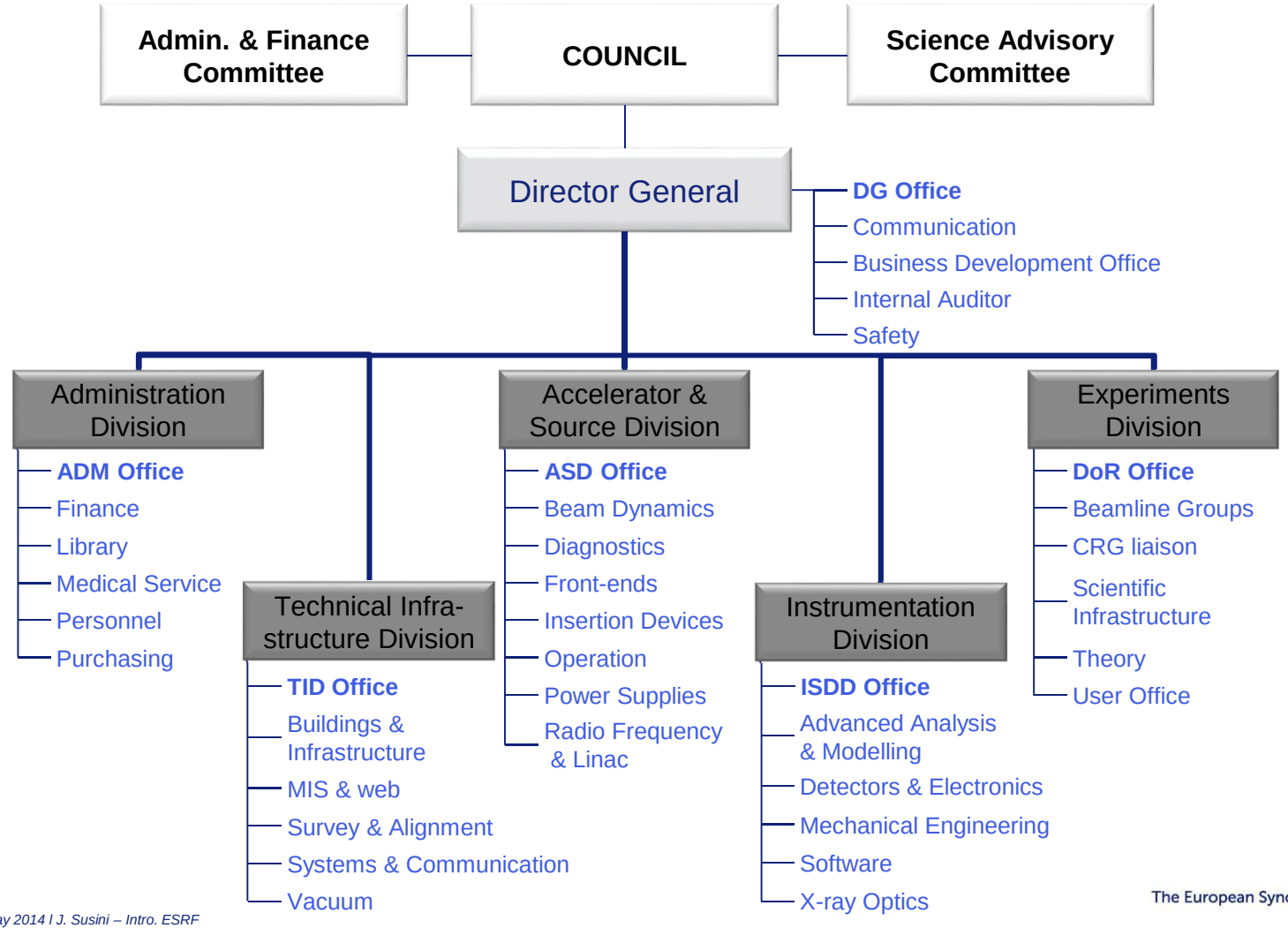


Nobel Prizes in Chemistry:

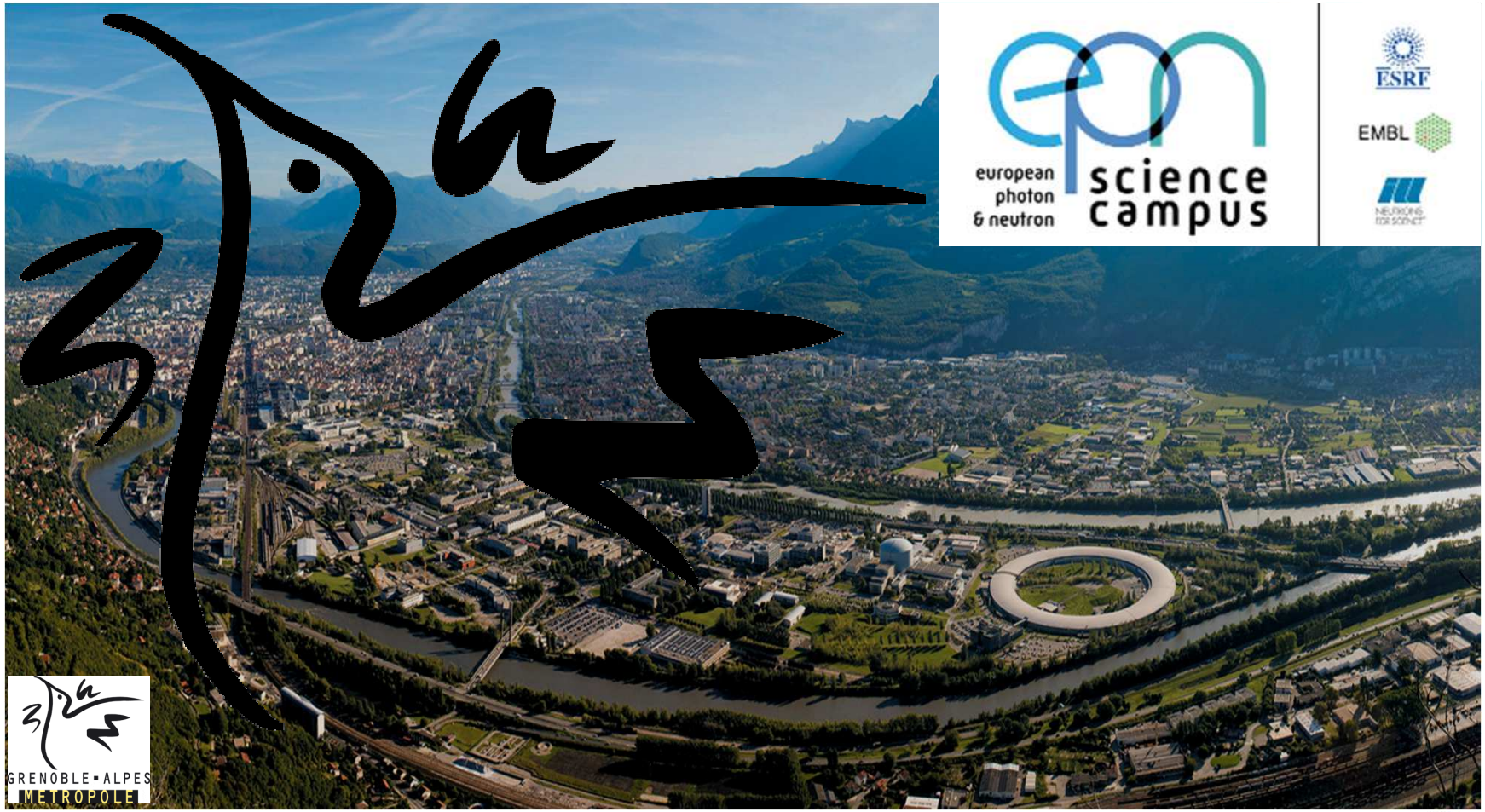
- 2012: R. J. Lefkowitz and B. K. Kobilka
  "studies of G-protein-coupled"
- 2009: V. Ramakrishnan, T. A. Steitz and A. E. Yonath
  "studies of the structure and function of the ribosome".
- 2003: R. MacKinnon
  "for structural and mechanistic studies of ion channels".

The European Synchrotron | ESRF

THE ESRF ORGANISATION CHART



THE ESRF IN GRENOBLE



The European Synchrotron | ESRF

A Light for Science

THANK YOU!

The European Synchrotron | ESRF