the Institute LAUE LANGEVIN

Jerome BEAUCOUR
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Founded in 1967

World leader in NEUTRON SCIENCE AND TECHNOLOGY

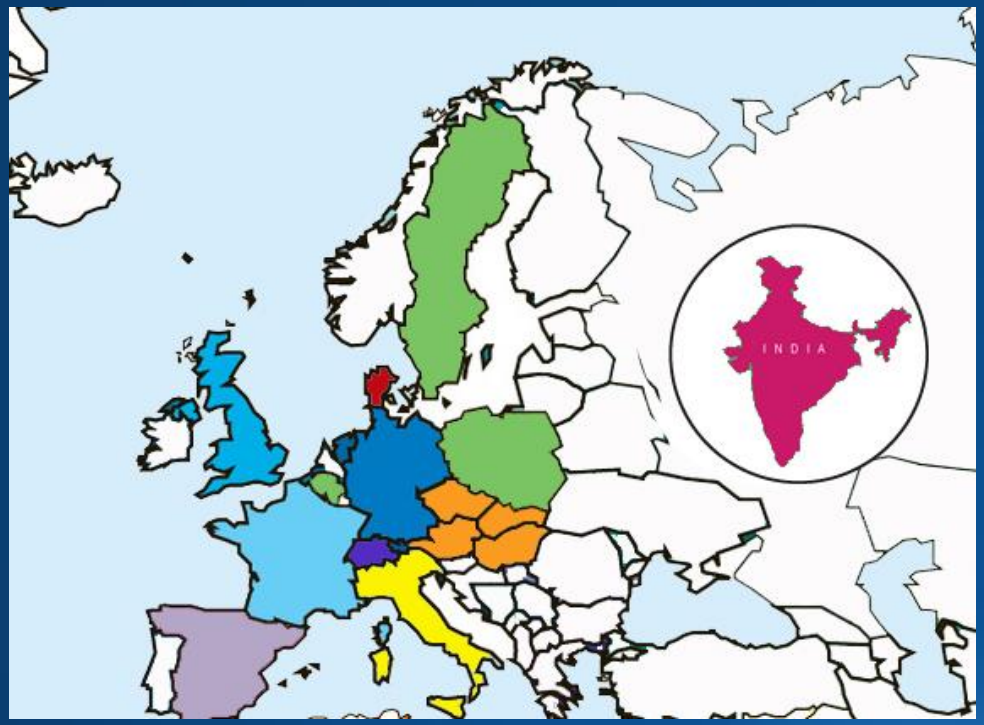
Located in Grenoble, FRANCE

Neutron sources:12 in Europe, 6 in North America, 5 in Asia and Oceania

The most intense neutron source in the world,

A user Facility at the service of international scientists to carry out scientific research at the frontiers' of modern science.

ILL member countries
and their financial participation



Germany : 25 %
UK : 25 %
France : 25 %
25% shared between the scientific partners:

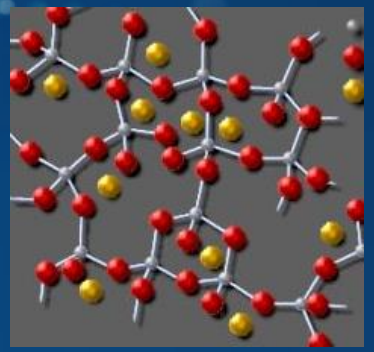
- Spain
- Italy
- Switzerland
- CENI (Central European Neutron Initiative, Austria, Czech Republic, Hungary, Slovakia)
- Denmark
- BELPOLSWENI (Belgian-Polish-Swedish Neutron Initiative)
- India

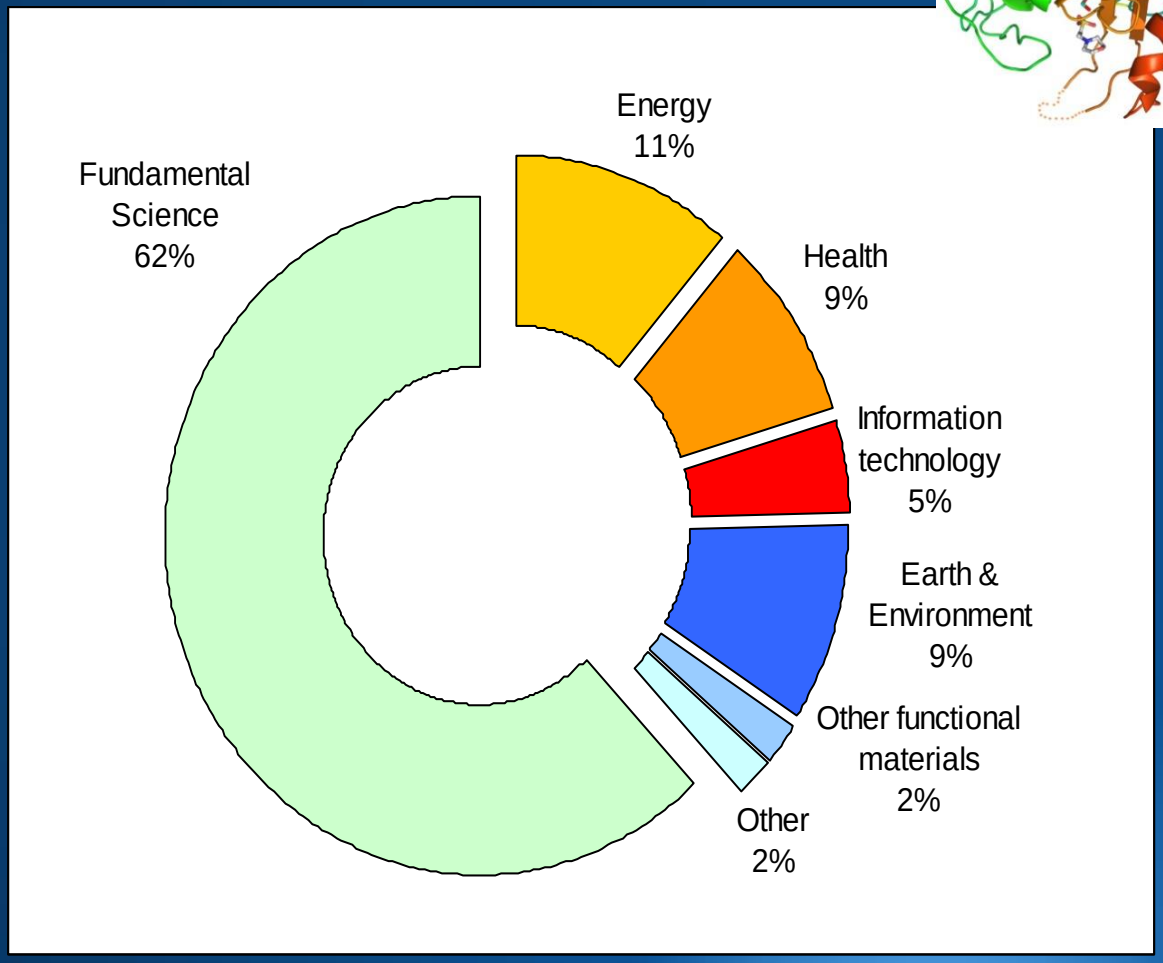
ILL:
Around 450p
100M€ annual budget

ILL users countries

AU	1,09%
BE	0,59%
CH	4,3%
CZ	0,9%
DE	17,6%
DK	0,36%
ES	6,68%
FR	30,51%
HU	0,38%
IT	4,68%
JP	1,66%
NL	0,29%
PL	0,81%
RU	3,85%
SW	0,86%
UK	23,52%
USA	1,9%

Science at the ILL





850 experiments/year

2000 users

38 countries

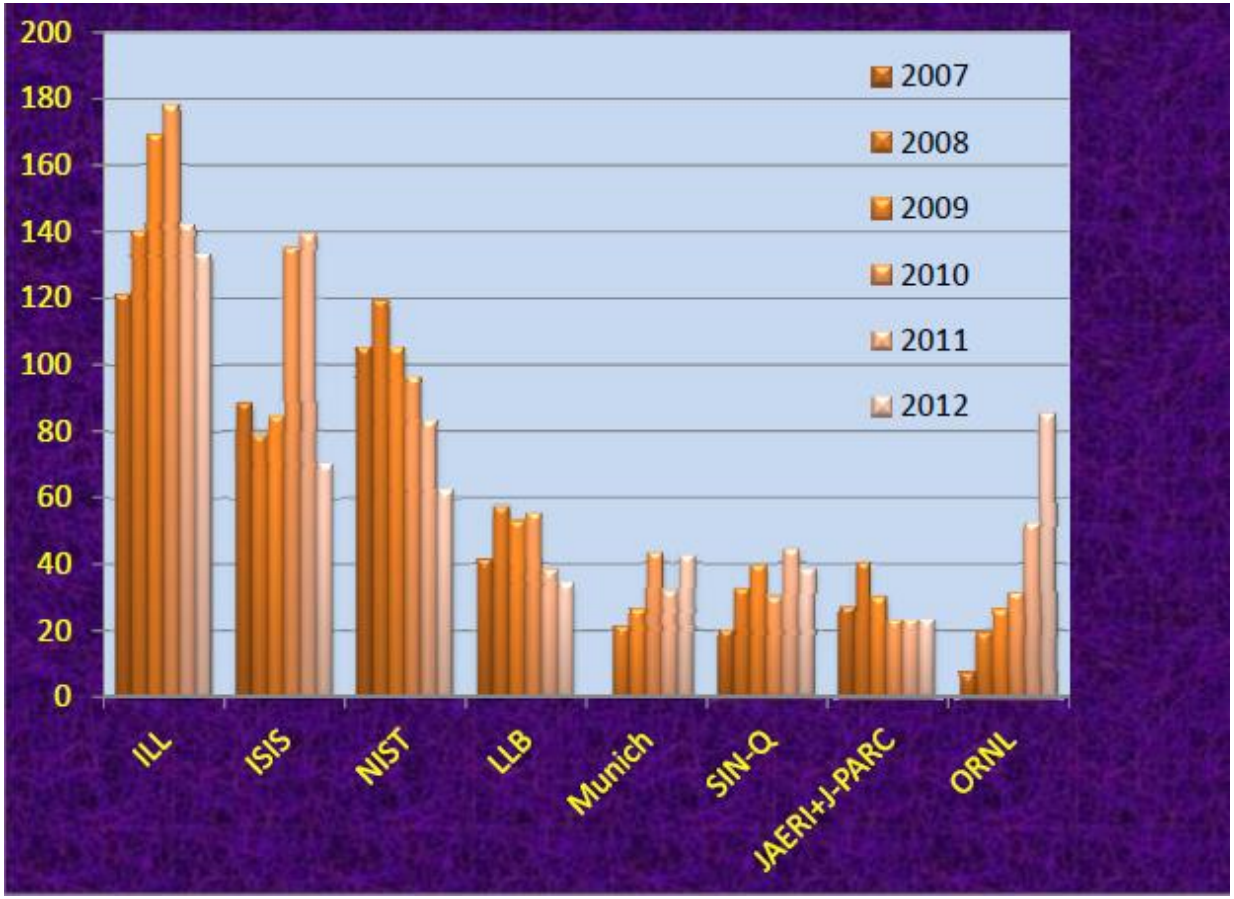
28 instruments + **10** CRG

650 publications/year

Output of the ILL

ILL high-impact publications

the journals covered are
PRL, Nature, Science, JMB, PRB, PRE, JACS, Macromolecules, Langmuir



Neutrons, a powerful probe

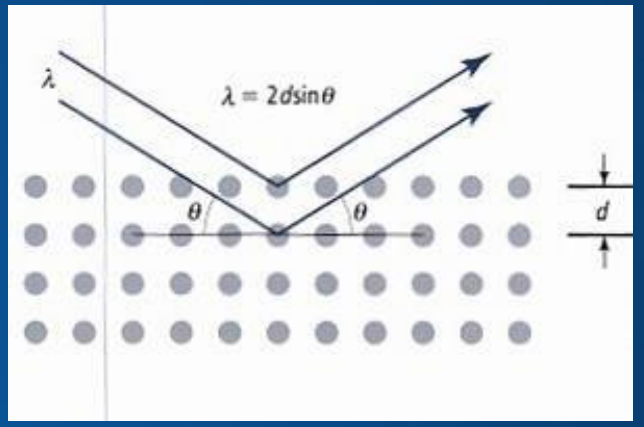
NEUTRONS FOR SCIENCE

Strongly Interact with ordered structures

Electrically neutral: they can penetrate deep into matter.

Neutrons possess a spin, and therefore sensitive to the magnetic properties of atoms.

They can distinguish between different elements and their various isotopes (in particular H_2O versus D_2O)

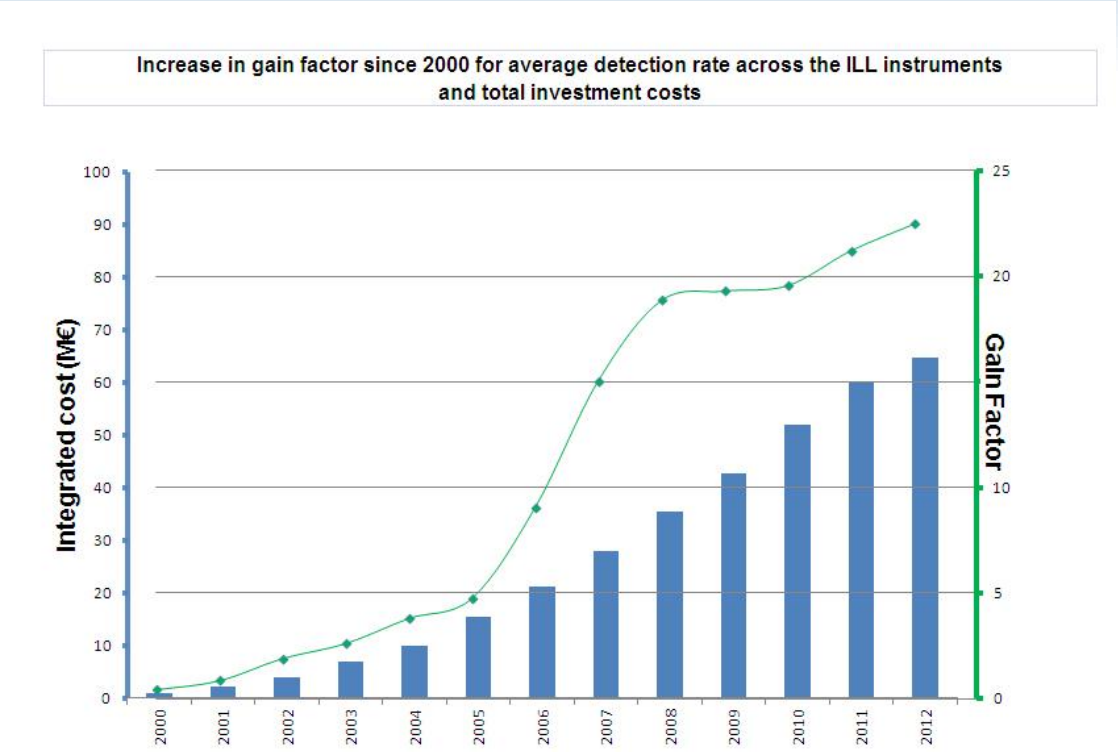


It is a non-destructive technique

(mEV enery range)

After 40 years, we are still leading the neutron science

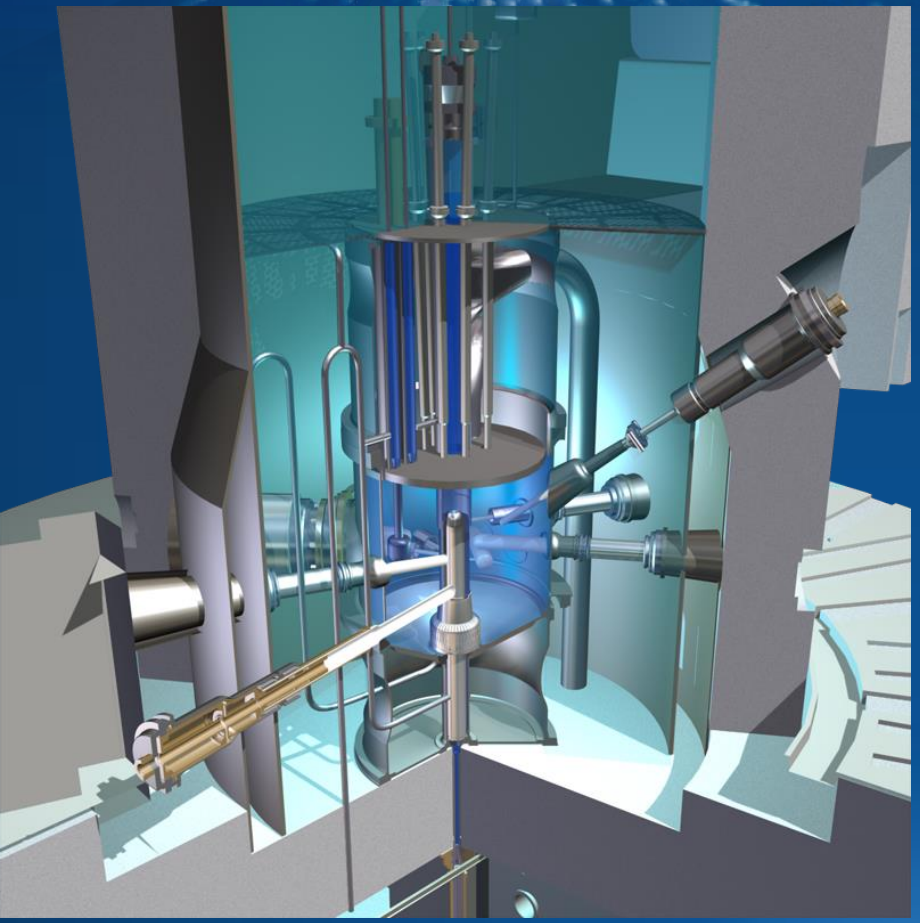
A continuous Investment program: 100M€ over 10 years

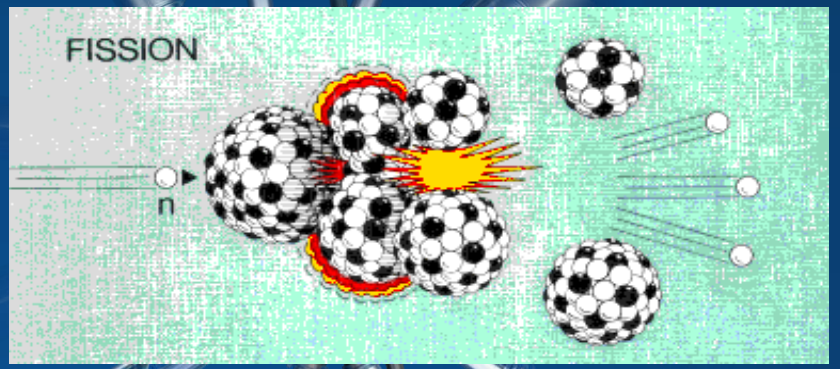


The ILL Reactor

5 x 10^{18} fast neutrons/sec generated at 58 MW

NEUTRONS FOR SCIENCE®

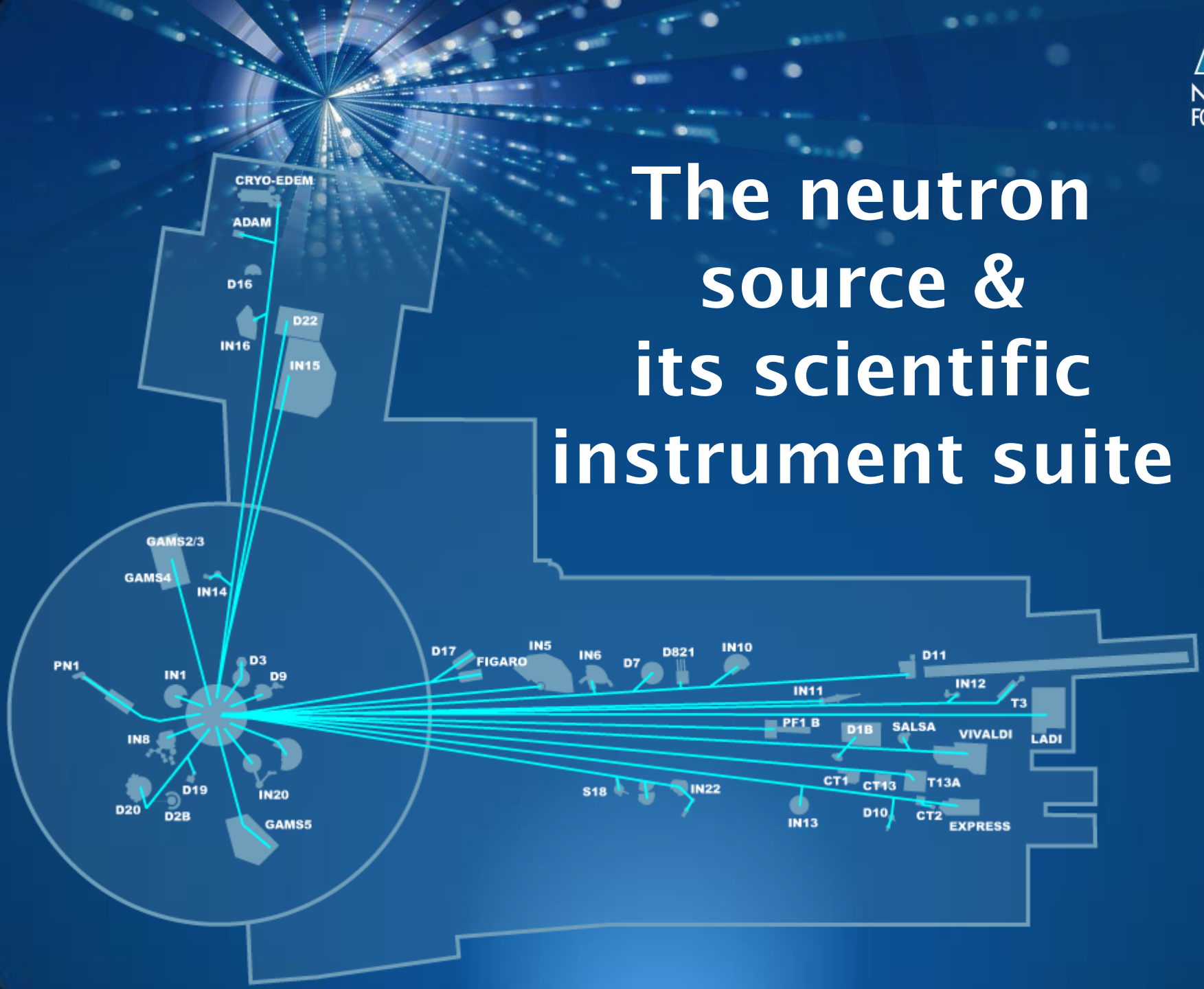




A neutron source operating 200 days/year
58 MW reactor - 4 cycles/year (cycles of 50 days)

NEUTRONS FOR SCIENCE®

The neutron source & its scientific instrument suite



EPN science campus: a site unique in the world ..