DSM/IRAMIS

Institut de Physique

Université de Caen Normandie

Radiobiology experiments at GANIL

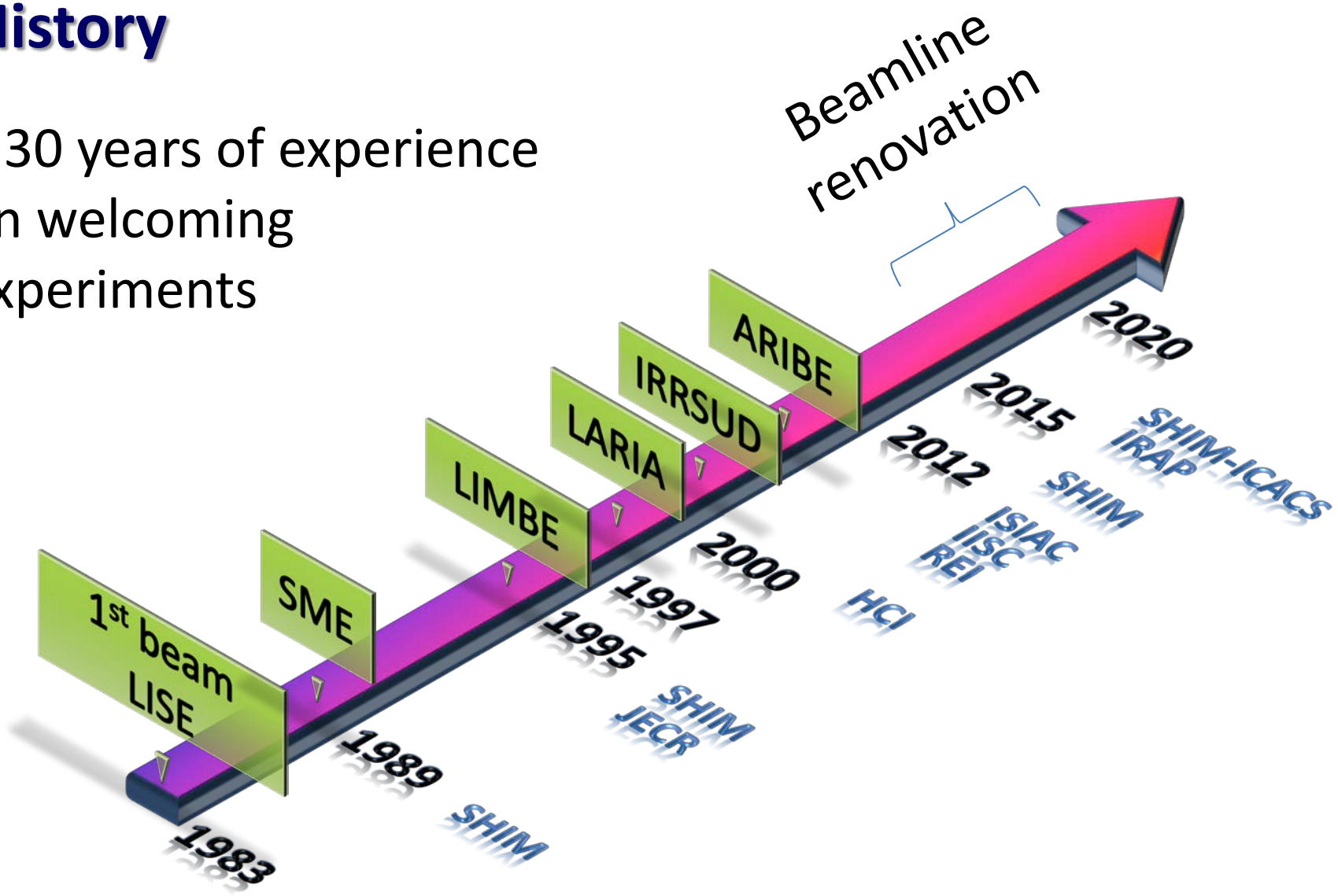
Welcome platform of Interdisciplinary researches at GANIL

J. RANGAMA, Centre Interdisciplinaire de Recherche avec les Ions Lourds

LABORATOIRE D'EXCELLENCE

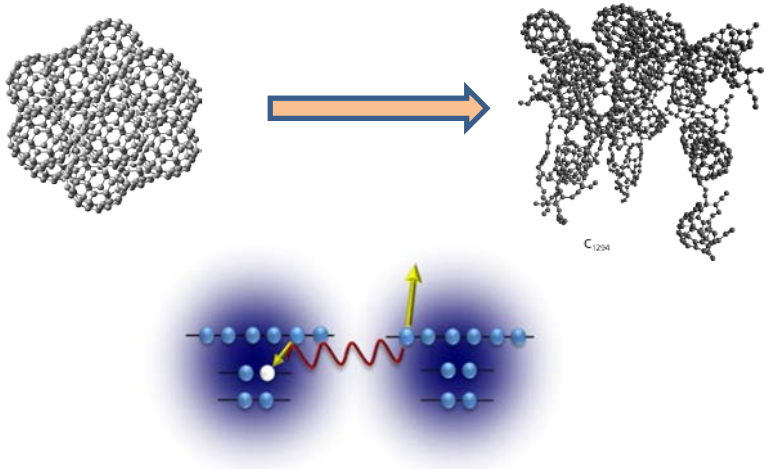
History

> 30 years of experience on welcoming experiments



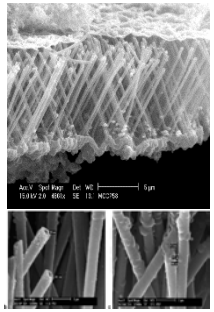
Interdisciplinarity

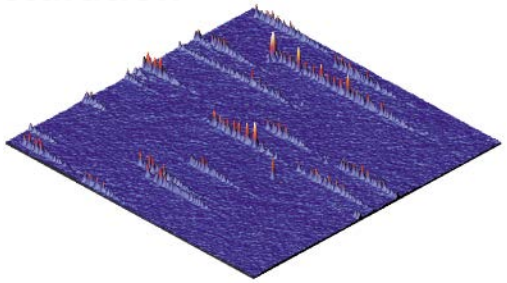
Dilute matter : atoms, molecules and clusters



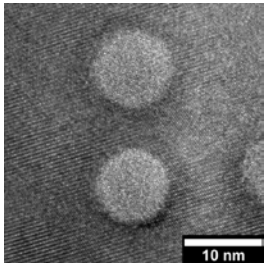
Radiochemistry, Astrophysics/chemistry

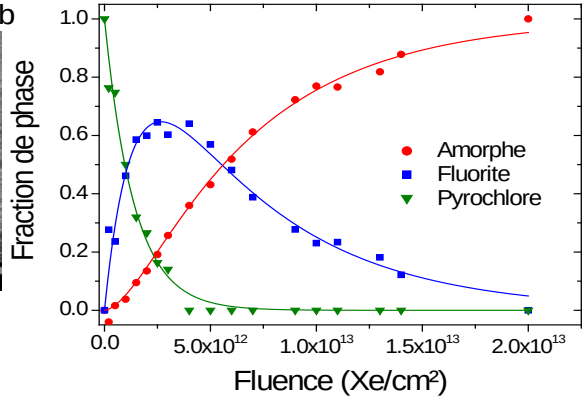
nano structuration



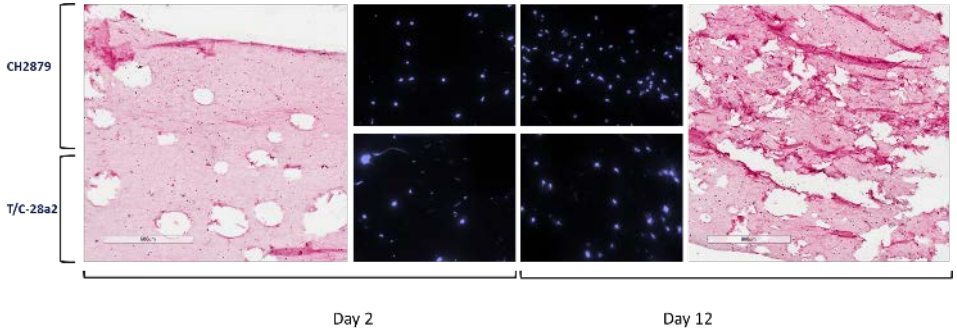


Material science

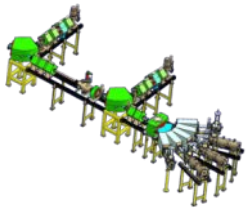


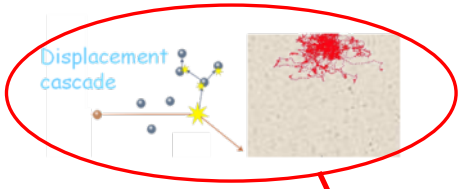


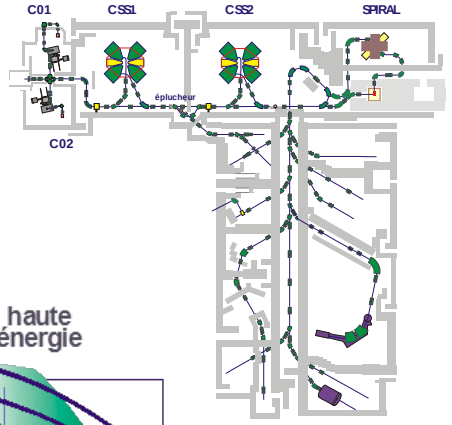
Radiobiology

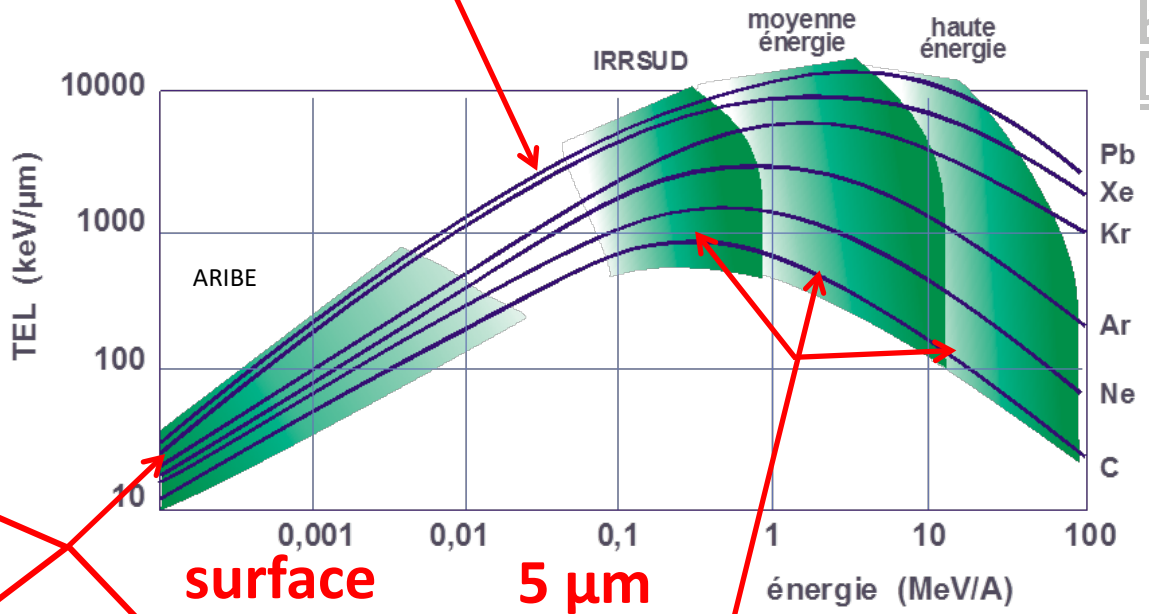


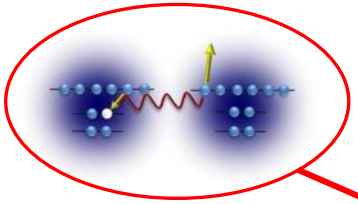
Large range of accessible energies

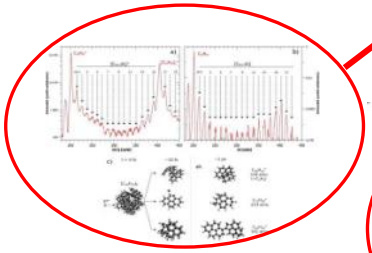


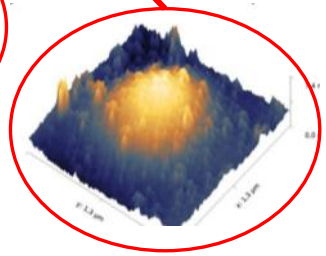












surface

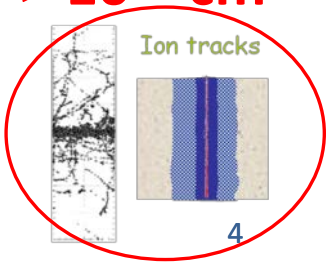
5 µm

> 10^{15} cm^{-2}

100 µm

1500 µm

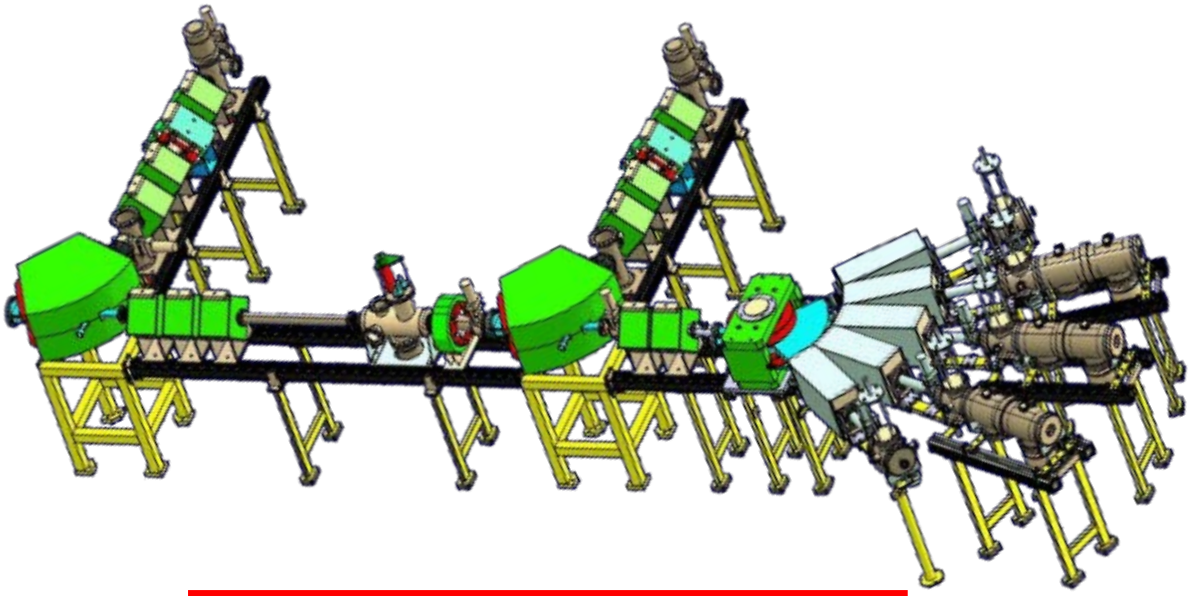
10^{13} cm^{-2}



Beamlines available for Interdisciplinary researches at GANIL :

ARIBE

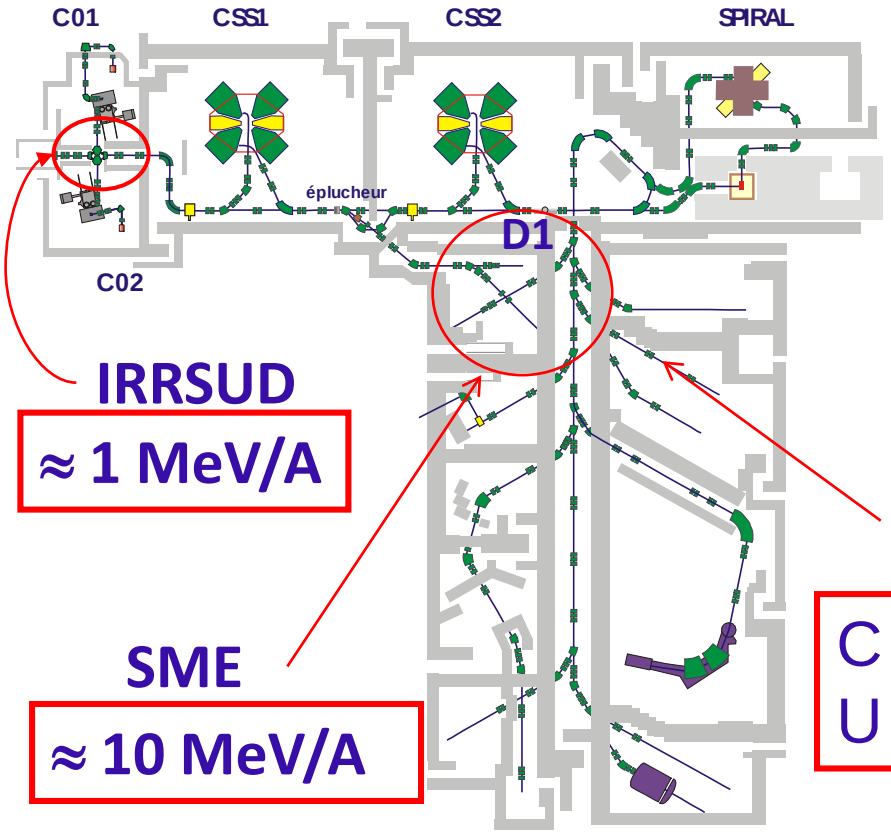
Low energy beamline



From He^{+} to Xe^{31+} ;
18 kV

Beamlines available for Interdisciplinary researches at GANIL :

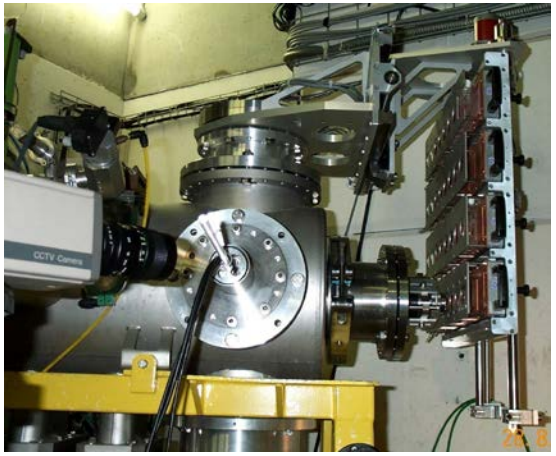
From C to U at high energy



Sample holder, **dosimetry control**, management of users, samples, beamtime sharing,...

C @ 95 MeV/A
U @ 24 MeV/A

Radiobiology equipments



Biological sample changer developed by CIMAP

ARIA Team:

Clean Hoods

Incubators (CO2, tri-gas)

1 water baths

1 inverted microscope

1 centrifuge

1 small bench centrifuge

-80°C Freezer Panasonic

-20°C cold room

+4°C cold room……..

Welcoming Interdisciplinary researches (IR): our missions

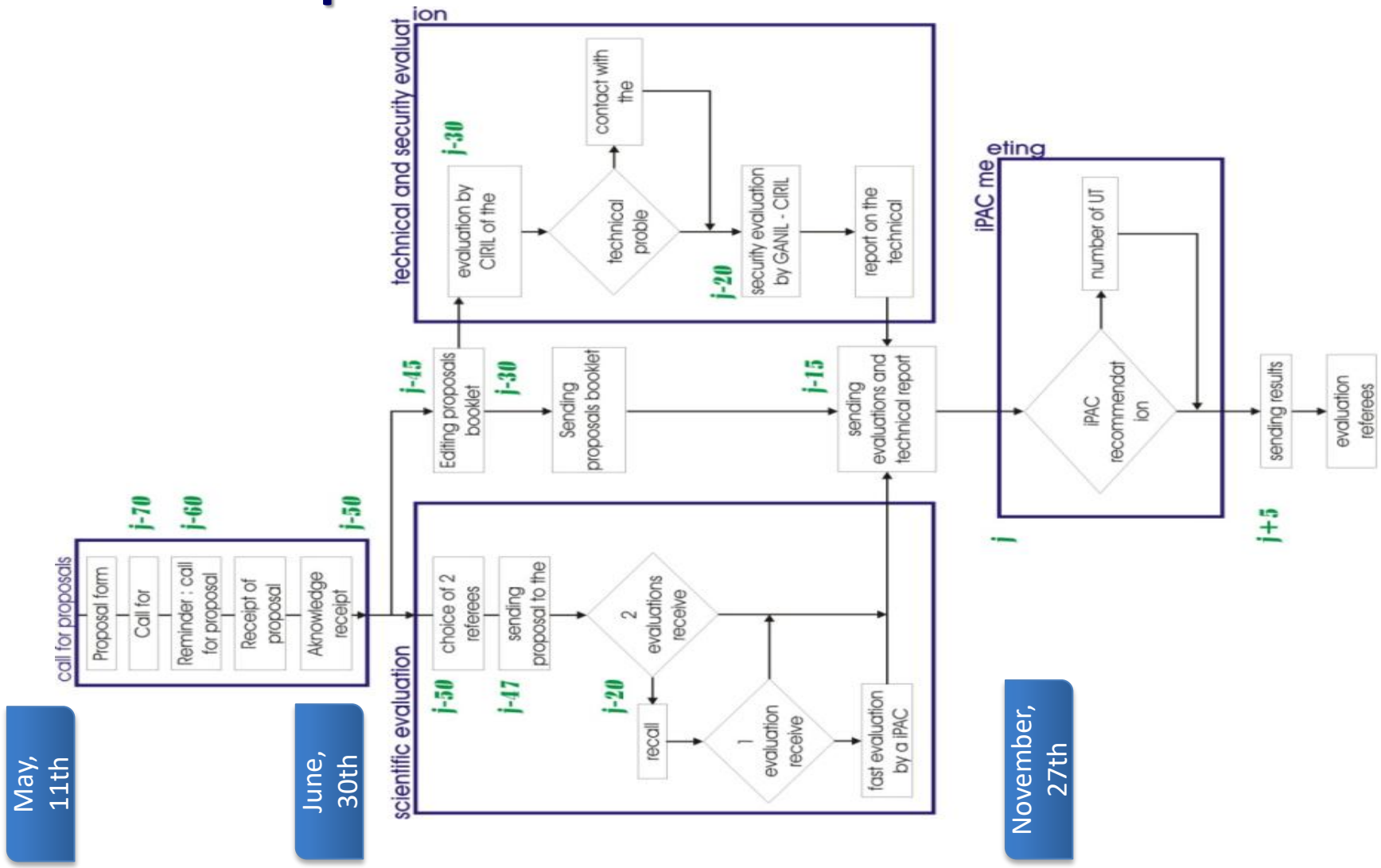
4 Beam lines/4 Energy ranges

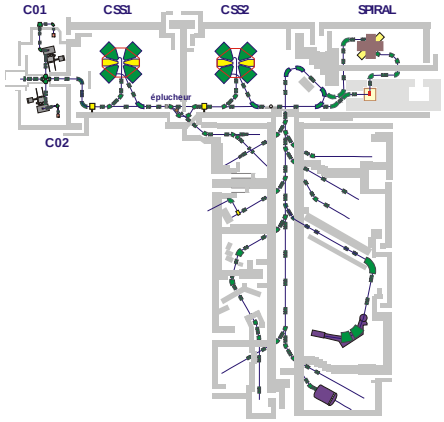
- **Help** the scientists to use the ion beams (before, during and after their experiments)
- **Manage** experiments selection with the iPAC,
- **Establish** the schedule of the IR experiments
- **Develop and maintain** the beam lines as well as the on-line instrumentation for the experimentalists requests
- **Promote** the use of GANIL ion beams for IR

Selection process at CIRIL

- Similar to journal evaluation (due to multi disciplinarity)
- 2-3 external experts to evaluation each proposal
- A scientific committee (iPAC) meets, once a year or a year and half, to validate the proposals within expert evaluations and recommendations, requested time, the facility availability, etc…
- A technical committee (iTAC) checks the feasibility of the proposals in terms of security and rules
- 70 – 90 days for the whole process, 30 to 40 proposals per call

Selection process at CIRIL





Coordination:
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P. Rousseau: ARIBE
A. Méry: SME-HE

+

Technical staff:
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F. Dardy
J-M. Ramillon
F. Ropars
A. Sineau

Administration:
S. Colineaux
L. Debaermaker

+

Experimental area manager:
T. Madi : D1 et IRRSUD
C. Feierstein: ARIBE

+

Scientific staff:

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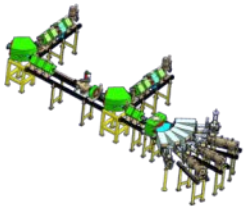
P. Boduch	A. Mery
A. Cassimi	I. Monnet
J-Y Chesnel	Y. Ngono
F. Chevalier	J-C. Poully
A. Domaracka	J. Rangama
E. Gardes	H. Rothard
C. Grygiel	P. Rousseau
S. Haghdoost	V. Vizcaino



+ Strong support of GANIL's technical staff

Thank you for your attention