EQUIPEX - DESIR

✓ Requested funding: 15.2 M€

Spokesperson: J.-C. Thomas, GANIL

Budget: 8.1 M€ (buildings) + 5.7 M€ (beam lines) + 1.4 M€ (general equipment)

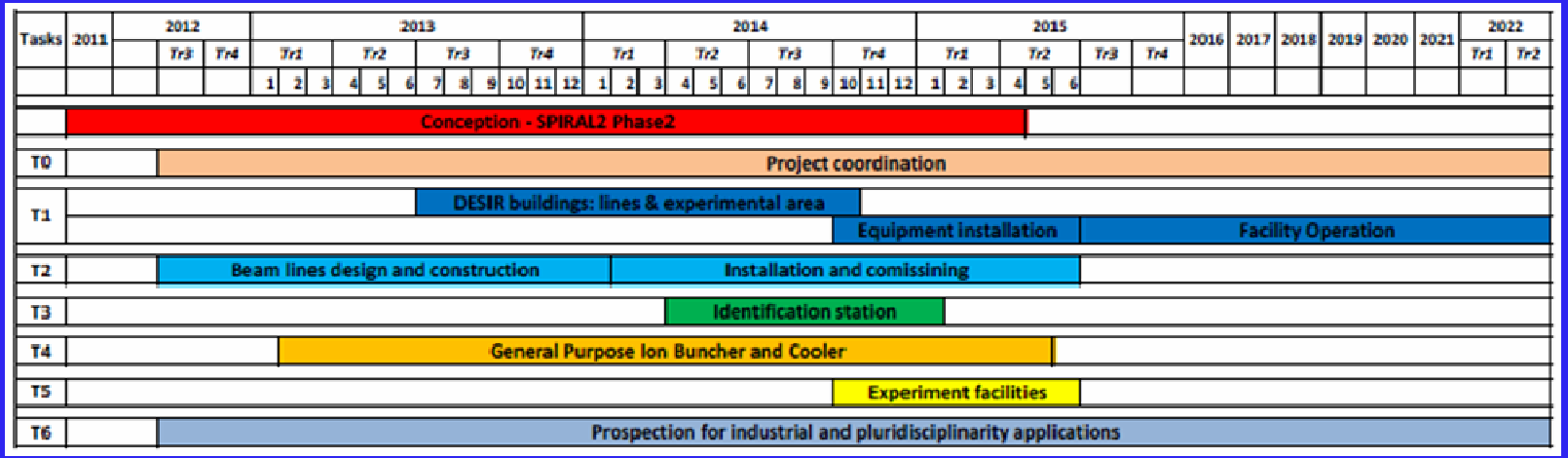
Duration of the project: 7.5 years

Manpower involved: 543.7 man-months
(incl. 24 m-months post-doc + 18 m-months CCD engineer from EQUIPEX)

Partner laboratories (Task leaders):

GANIL:	**Coordination, DESIR buildings, industrial applications, General Purpose Ion Buncher; *289 m-months***
CENBG:	**Facility equipment, beam lines, command/control; *29.3 m-months* + 18 m-months CCD**
CIMAP:	**Pluridisciplinarity research; *4.5 m-months***
CSNSM:	**General Purpose Ion Buncher; *19.4 m-months* + 24 m-months post-doc**
IPHC:	**Identification station; *22.6 m-months***
IPN Orsay:	**Beam lines; *113 m-months***
LPC Caen:	**General Purpose Ion Buncher; *23.9 m-months***

Plannning



Budget

Partner	Manpower (man.months)	Total cost (k€)	Requested funding (k€)	Phase 1		Phase 2	
				Total cost (k€)	Requested funding (k€)	Total cost (k€)	Requested funding (k€)
GANIL (coordinator)	289	16 405	15 200	14 799	14 096	1 606	1 105
CENBG	*29.3 + 18 CDD*	220	-	152	-	68	-
CIMAP	*4.5*	34	-	14	-	20	-
CSNSM	*19.4 + 24 CDD*	145.5	-	145.5	-	-	-
IPHC	22.6	170	-	170	-	-	-
IPNO	113	847.5	-	847.5	-	-	-
LPC	23.9	179	-	82	-	97	-
All	***543.7***	**18 001**	**15 200**	**16 210**	**14 096**	**1 791**	**1 105**

DESIR equipments

✓ General purpose equipments inside the DESIR hall

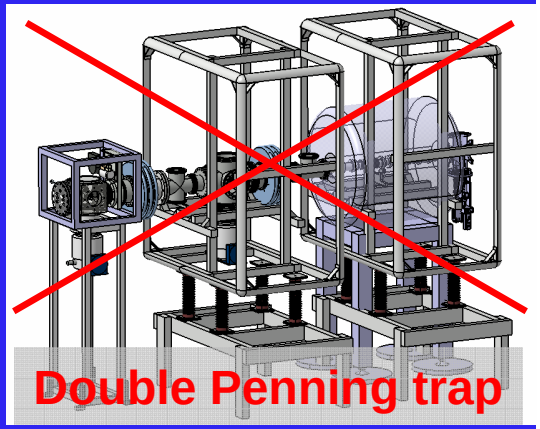
* Identification and beam intensity measurement station
  Convener: Ph. Dessagne, IPHC Strasbourg
  (in collaboration with S3 for the low-energy part)

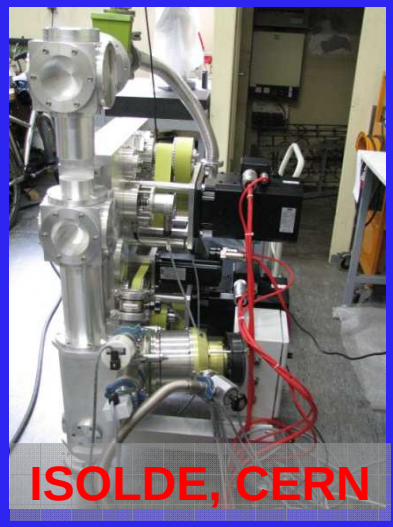
* General purpose ion buncher (GPIB)
  Convener: D. Lunney, CSNSM
  Collaboration: CSNSM, GANIL, LPC Caen

* Set of stable ion sources
  Convener: B. Blank, CENBG

* Beam lines
  Convener: F. Leblanc, IPNO
  Collaboration: CSNSM, GANIL, CENBG

* Double Penning Trap
  Convener: B. Blank, CENBG
  Collaboration: CENBG, CSNSM

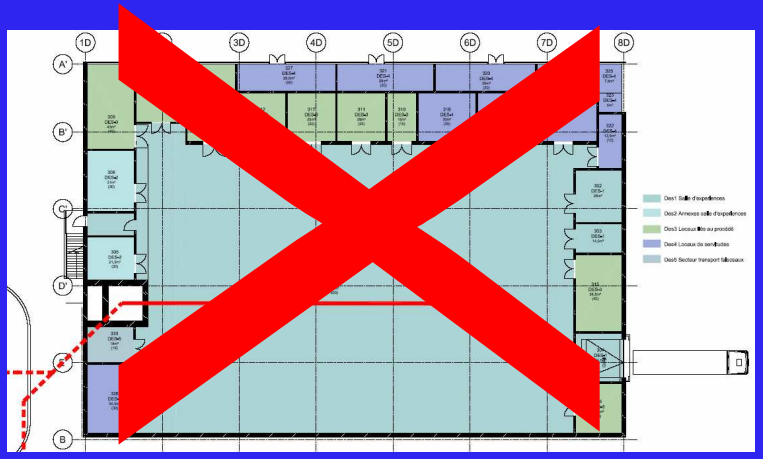


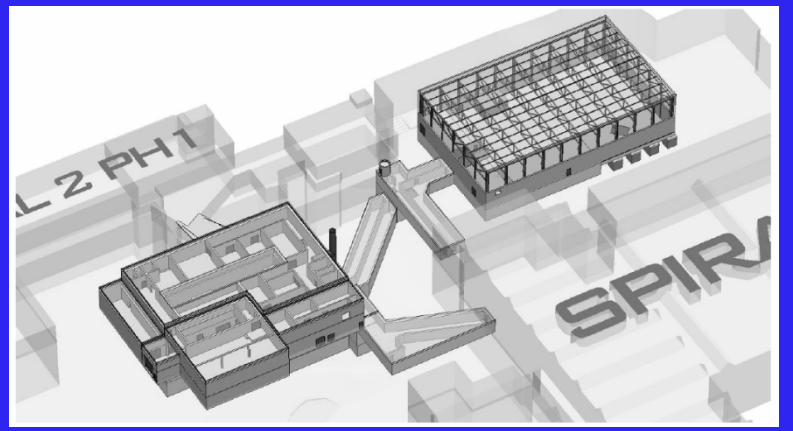


DESIR buildings

- ✓ Selection of the prime contractor: contract November 2010 ?
- ✓ Costs close to our own estimates

1500+600+400 = 2500 m^2: 8.1 *M€*





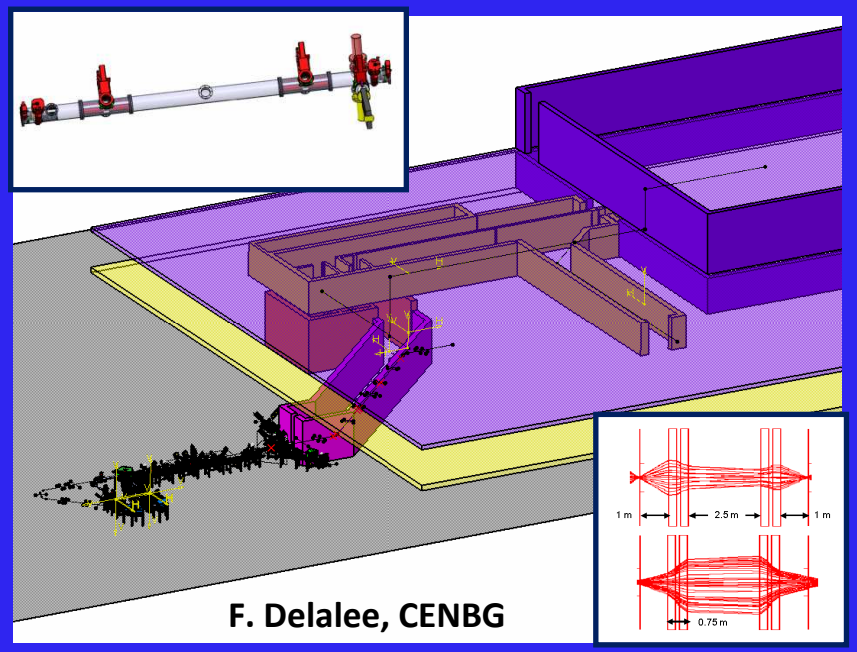
- ✓ Data collection and synthesis: From June to the end of 2010
- ✓ Safety issues: discussions started with E. Pichot, to be defined by the end of 2010

-> Towards a detailed design study (APD) by mid 2011

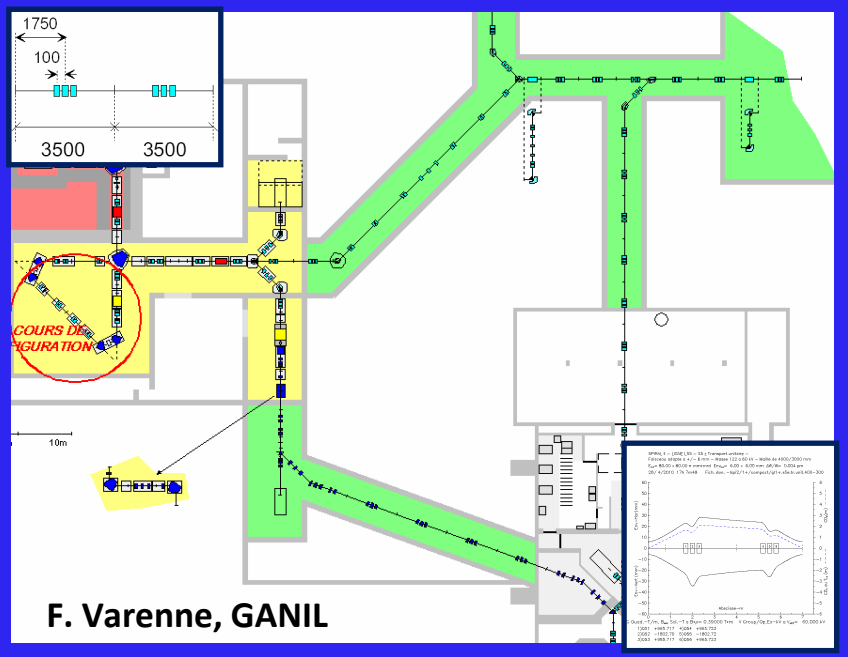
-> Building decision by the beginning of 2012

DESIR beam lines

- ✓ preliminary design studies by D. Lunney (CSNSM) and F. Varenne (GANIL)
- ✓ ~95 m with 6 to 7 m long sections: ~5.7 *M€*



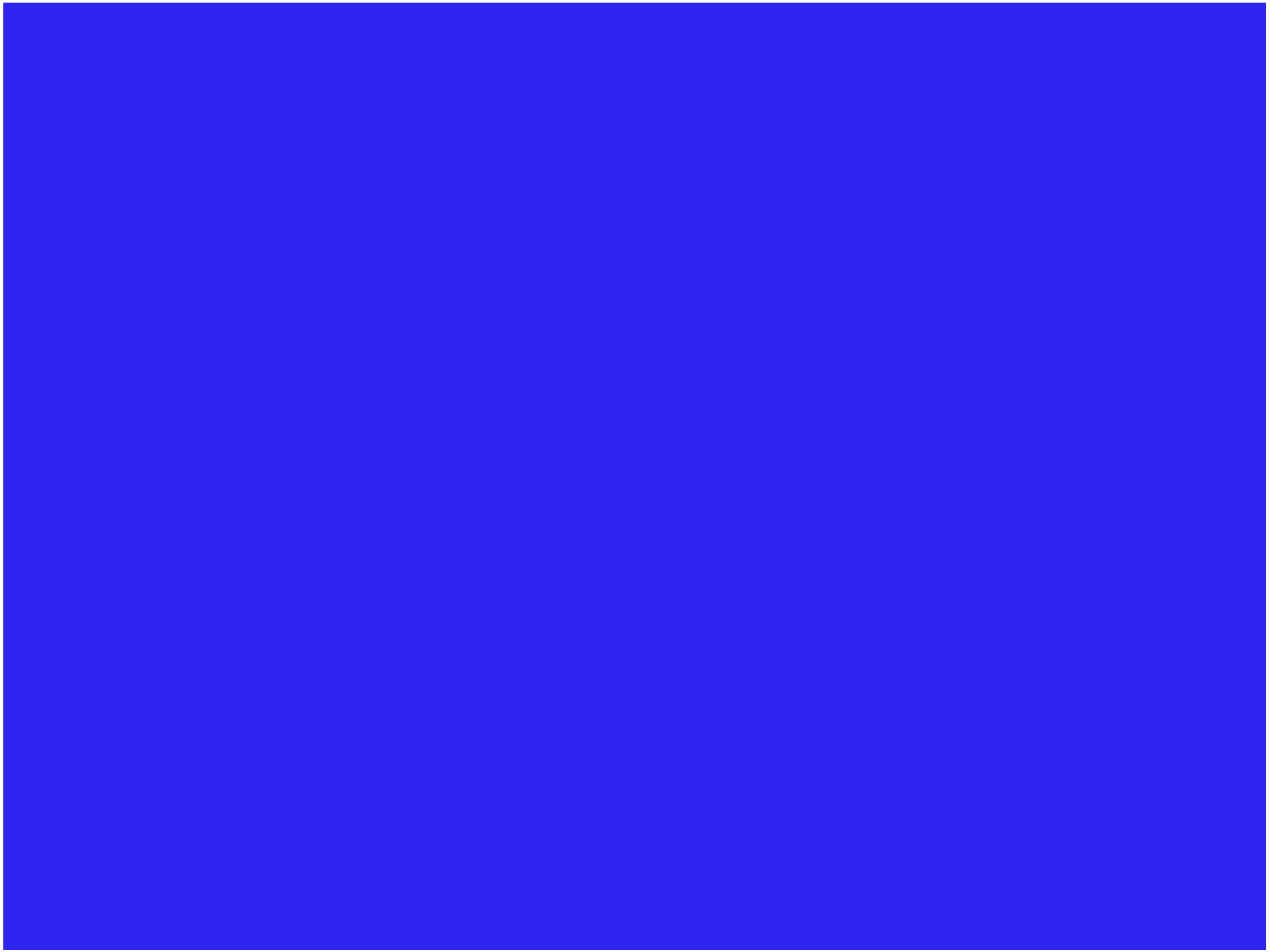
F. Delalee, CENBG



F. Varenne, GANIL

- ✓ Detailed design study and construction of the beam lines:

  L. Perrot, F. Leblanc, IPN Orsay



LOI subjects

- **nuclear technology**: D. Cano Ott, L. Mathieu, B.M. Gomez, J.L. Tain
- **shell closure**: D. Verney, F. Delaunay, D. Lunney, J.L. Tain, G. Simpson, B.M. Gomez
- **P_n, P_{2n} values**: Y. Penionzhkevich
- **nuclear astrophysics**: T. Kurtukian Nieto, A. Herlert, D. Lunney, B.M. Gomez
- **fast-timing**: G. Simpson
- **cluster radioactivity**: B. Blank
- **beta-2p**: P. Ascher
- **0+ - 0+ transition**: C. Weber, M. Gerbaux, J.L. Tain
- **mirror transitions**: A. Bacquias, E. Lienard
- **beta-neutrino correlations**: E. Lienard, H. Wilschut, N. Sewerjins
- **very heavy masses**: P. Thirolf
- **laser spectroscopy**: G. Neyens, P. Campbell, K. Flanagan, B. Cheal, F. Charlwood, T. Cocolios
- **beta-decay of polarized nuclei**: T. Shimoda (C.Petrache)