### The DESIR facility at SPIRAL2

- technical design report
- construction program -> talk of J.M. Lagniel
- HRS version 2009
- DESIR layout
- Work packages
- Finances
- SPIRAL2 schedule
- possible beam time schedule

DESIR meeting, SPIRAL2 week, January 26-29, 2009

### The DESIR Technical Design Report

- about 100 pages of technical description of DESIR facility and its equipment
- co-signed by 111 physicists and engineers of 15 countries
- submitted on December 19, 2009
- will be presented to SPIRAL2 SAC on January 29, 2009
- contains a general description of buildings and interfaces
- description of major installations like traps, spectroscopy setups etc
- report available on DESIR web page (www.cenbg.in2p3.fr/desir)









## RFQ - HRS: Use with CIME + by-pass







Problem: double HRS --- double price???







#### **DESIR hall: level -1**



#### **DESIR work packages**

#### • RFQ SHIRAC:

- HRS:
- DESIR building:
- General purpose ion buncher GPIB + stable ion sources:
- Identification station:
- Beam transport lines:
- Safety and security:
- Command / Control, diagnostics:

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# **DESIR** financial situation

Main parts:	estimated costs	fund available
• RFQ and HRS « building »:	most likely inclue	ded in SPIRAL2 project
<ul> <li>DESIR building + interfaces:</li> </ul>	6000 k€	2000 k€(CPER)
• RFQ:	450 k€ + ?	320 k€(CPER)
• HRS:	2000 k€ + ?	-
• beam lines:	4500 k€	-
<ul> <li>off-line sources + GPIB:</li> </ul>	290 k€	-
<ul> <li>identification station:</li> </ul>	140 k€	-
<ul> <li>control / command, diagnostics</li> </ul>	: 400 k€	together with SPIRAL2

# **SPIRAL2 Schedule**

	2006	2007	2008	2009	2010	2011	2012	2013
	T1 T2 T3 T4							
Accelerator building & associat	ted ex	perime	ental h	all				
Elaboration of programme								
External Review of programme	8 Octobe	r 2007 🕇						
Tenders buildings - jury meetings	Janua	ary 2008	🛨 🕇 June	2008				
Conceptual study of buildings (APS +)								
Request Permit for construction				🛛 🛨 May	2009			
Permit for construction granted				<u> </u>	Decembe	er 2009		
Construction of buildings								
Hand-over of buildings						🕇 Mare	ch 2011	
Installation of equipement								
First beams							🕇 Februa	aryr 2012
Operation								
Production building & associat	ed exp	perime	ntal h	all (DE	SIR)			
Elaboration of programme								
External Review of programme			*					
Tenders for buildings - jury meetings		Ма	rch 2009	* *				
Conceptual study of buildings (APS +)								
Request for permit for construction					📩 📩 🛨 Ju	ly 2010		
Conceptual study of buildings (APD)								
Permit for construction granted					*	Decembe	er 2010	
Construction of buildings								
Installation of equipement								
Tests								
Green light!								<u> </u>
Operation								

## **Operation of GANIL/SPIRAL1/SPIRAL2**

Standard planning; one production cave

#### **DESIR:** 29 weeks of RIB/year: 10 weeks of RIB from SPIRAL2, 4 weeks from S3, 15 weeks from SPIRAL1

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## Next steps.....

- RFQ: on-going tests, study of "nuclearisation", study of final version of RFQ
- HRS: detailed optical study of new ALPHA version, detailed mechanical study
- beam lines: preliminary design, cost estimate, detailed design study
- stable ion sources: definition, purchase
- GPIB: study and construction

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- Identification station: preliminary design, detailed design, construction
- DESIR building: like SPIRAL2 Phase 2 construction program....

decision about construction at latest mid 2010