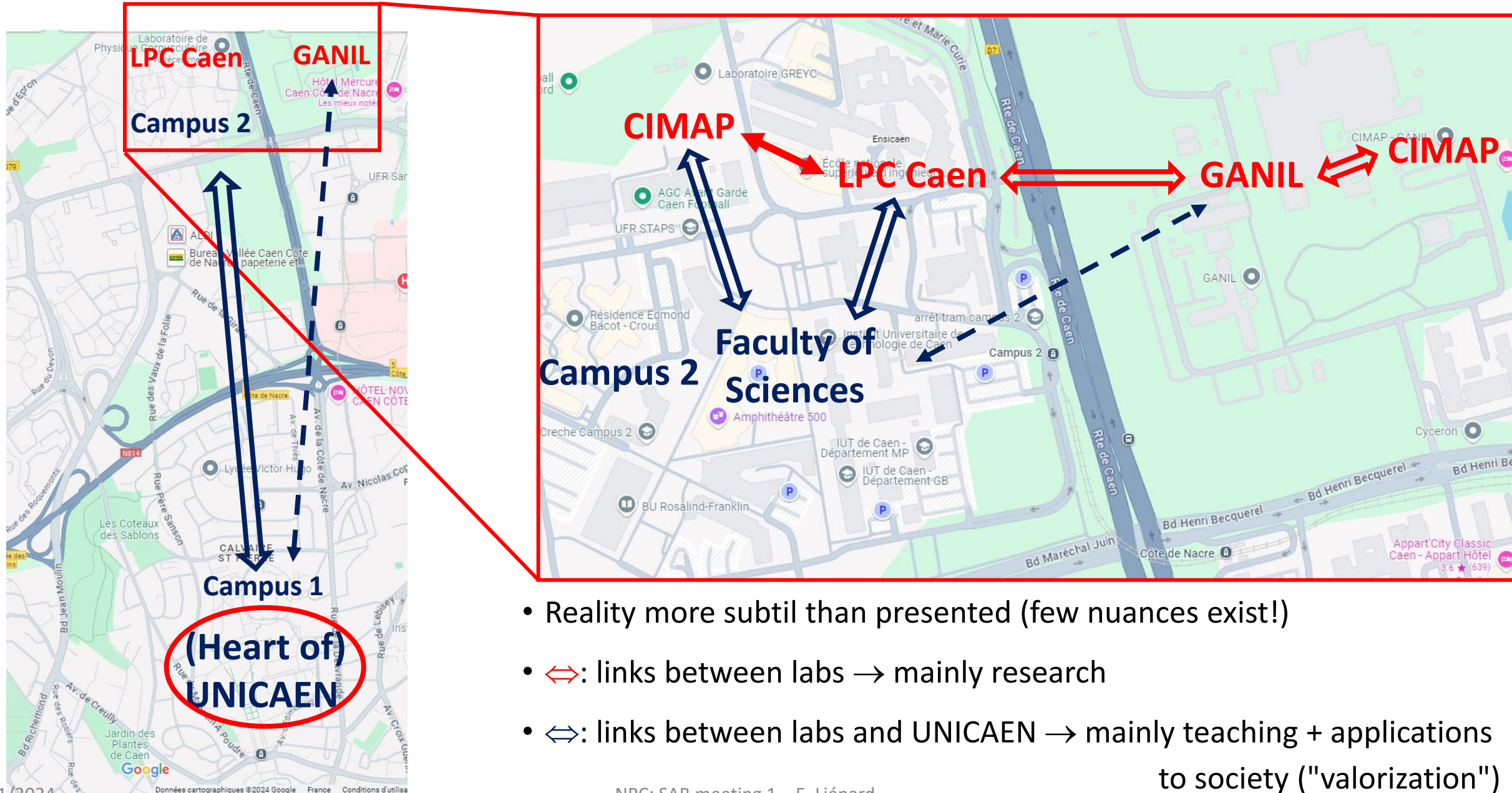


AXIS 1: NUCLEAR PHYSICS CENTER

Scientific Advisory Board: meeting n°1

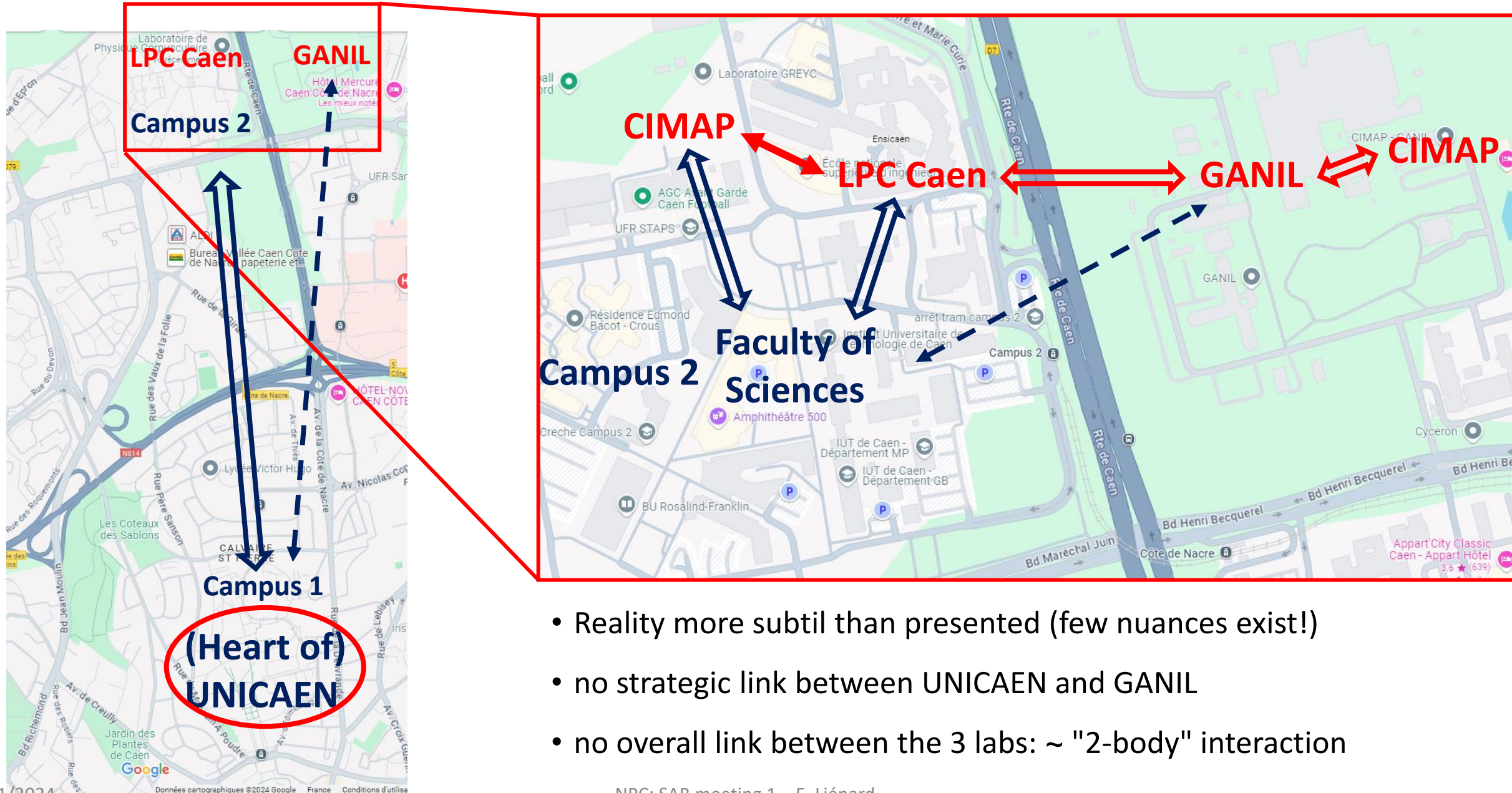


LPC Caen, CIMAP, GANIL & UNICAEN: Situation & relationship



- Reality more subtil than presented (few nuances exist!)
- ⇔: links between labs → mainly research
- ⇔: links between labs and UNICAEN → mainly teaching + applications to society ("valorization")

LPC Caen, CIMAP, GANIL & UNICAEN: Situation & relationship



LPC Caen, CIMAP, GANIL & UNICAEN: Situation & relationship

- Reality more subtil than presented (few nuances exist!)
- \Leftrightarrow : links between labs \rightarrow mainly research
- \Leftrightarrow : links between labs and UNICAEN \rightarrow mainly teaching + applications to society ("valorization")
- no strategic link between UNICAEN and GANIL
- no overall link between the 3 labs: ~ "2-body" interaction

CaeSAR: project allowing the creation of

- a global connection between labs, driven by UNICAEN
- a strategic link between GANIL & UNICAEN

Consequences: UNICAEN takes advantage of the presence of GANIL in Caen
Means (HR) are injected in the new GANIL installations by UNICAEN

Leadership of NPC by LPC Caen which is the nuclear physics laboratory of UNICAEN

Why the project **CaeSAR** was succesful from NPC point of view?

- **GANIL/SPIRAL2:** **NFS** + **S3** + **DESIR**
 (n) (exotic heavy nuclei) (high precision measurement, SP1&2)

New installations = state-of-the-art setups

3 halls in one center = unique worldwide

= Source of potential new discoveries in the next decade

5 WPs
+ 1 WP (management)

- **LPC Caen:** **2 "Junior Professor Chairs"** (CPJ, CNRS/UNICAEN)

CPJ-CNRS: Leendert Hayen, specialist of nuclear beta decay → **DESIR**

CPJ-UNICAEN: Antoine de Roubin, specialist of nuclear structure of exotic nuclei → **S3-LEB**

= High level competition, high potential of innovation, ERC submitters (LH did it in Oct 2024!)

- **CIMAP** (implanted on GANIL site): **Interdisciplinary research**

CIRIL platform: 4 lines with state-of-the-art setups

- **Teaching environment:** attraction of passionate students → **"Graduate school"** item

CaeSAR- Nuclear Physics Center: contents

Excellence Center: NPC (Nuclear Physics Center)

Director: Etienne Liénard

Uploaded on INDICO site

Table 1: List of work packages (WP)

WP No	Work Package Title	Start Month	End month
1	Management Laboratory directors* + UNICAEN (DRI, Presidency)	1	72
2	NFS Experiments FR Lecolley (UNICAEN, LPC Caen) + X Ledoux (CEA, GANIL)	9	60
3	S ³ A de Roubin (UNICAEN, LPC Caen) + M Laatiaoui (CNRS, GANIL)	3	72
4	DESIR L Hayen (CNRS, LPC Caen) + JC Thomas (CNRS, GANIL)	11	72
5	Interdisciplinary research S Maclot (UNICAEN, CIMAP)	3	71
6	Graduate School F Gulminelli (UNICAEN, LPC Caen, head of master of phys.)	1	70

**: E. Liénard, O. Lopez (LPCC) - P. Chomaz, F. Farget (GANIL) - I. Monnet, J. Rangama (CIMAP)*

CaeSAR- Nuclear Physics Center: budget

~2.35 M€ in 6 years (HR, schools, internships,...) shared between the 3 labs



GANIL



Center	Object	Cost per unit / per year	Nb in 6 years	Region k€	ExcellencES k€	Total	LPC	GANIL	CIMAP	LPC	GANIL	CIMAP	
Nuclear	post doctoral fellow	90 k€ per post doct 18 months	3	135	135	270	2	1	0	180	90	0	
	ERC Booster	190 k€ (consumables 100 k€ + salary post doct 18 months 90 k€)	2	0	380	380	1		1	190	0	190	
	Chair external	500 k€ (salary chair 240 k€ + PhD 120 k€ + PostDoct 18 months 90 k€ + missions 50 k€)	1	120	380	500		1		0	500	0	
	1 Chair permanent	260 k€ (salary PhD 120 k€ + Post Doct 18 months 90 k€ + missions 50 k€)	1	120	140	260	0		1	0	0	260	
	Summer schools	25 k€ per school	4	50	50	100	4 for GS / Master NucPhys			100	0	0	
	Lab intership	6000 k€ per intership (gratification excellence 1000 euros per month on 6 months)	18		108	108	18 for GS / Master NucPhys			108	0	0	Managed @ LPCC for GS & the 3 labs
	research technicians	180 k€ per technician for 3 years	1	74.16	105.84	180		1		0	180	0	
	PhD	140 k€ (salary 120 k€ + missions 20 k€) per PhD	4	560		560	2	1	1	280	140	140	
TOTAL				1059.16	1298.84	2358				858	910	590	2358
										650	w/o GS elements		

CaeSAR - Nuclear Physics Center: Agenda of 1st SAB meeting

WEDNESDAY 6 NOVEMBER		
14:00 → 15:00	Welcome Welcome (UNICAEN/LPCC) / Presentation of CaeSAR (UNICAEN) / Presentation of the Nuclear Physics Center (LPCC, GANIL, CIMAP)	🕒 1h 📍 G. Ittis
15:00 → 15:30	Graduate school Orateur: Francesca GULMINELLI (LPC/Ensicæen)	🕒 30m 📍 G. Ittis
15:30 → 16:15	S3 Orateurs: Mustapha Laatiaoui (GANIL), Antoine de Roubin (LPC Caen)	🕒 45m 📍 G. Ittis
16:15 → 16:45	Coffee break	🕒 30m 📍 G. Ittis
16:45 → 17:30	DESIR Orateurs: Jean-Charles THOMAS (GANIL), Leendert HAYEN (LPC Caen)	🕒 45m 📍 G. Ittis
17:30 → 18:15	Interdisciplinary research Orateur: S. Maclot (CIMAP)	🕒 45m 📍 G. Ittis
20:00 → 22:00	Diner downtown	🕒 2h 📍 Caen
THURSDAY 7 NOVEMBER		
09:00 → 09:30	NFS experiments Orateur: François-René Lecolley (LPC Caen (ENSICAEN - CNRS/IN2P3 - UCN))	🕒 30m 📍 G. Ittis
09:30 → 11:30	Closed session	🕒 2h 📍 G. Ittis
11:30 → 12:00	Summary of conclusion and recommendations	🕒 30m 📍 G. Ittis
12:30 → 14:00	Lunch@GANIL	🕒 1h 30m 📍 GANIL
14:00 → 15:00	Visit of GANIL facilities	🕒 1h 📍 GANIL

Etienne Liénard

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Pôle de recherche

Particules & interactions fondamentales

« Mesures de précision à basse énergie »



www.lpc-caen.in2p3.fr

