DE LA RECHERCHE À L'INDUSTRIE

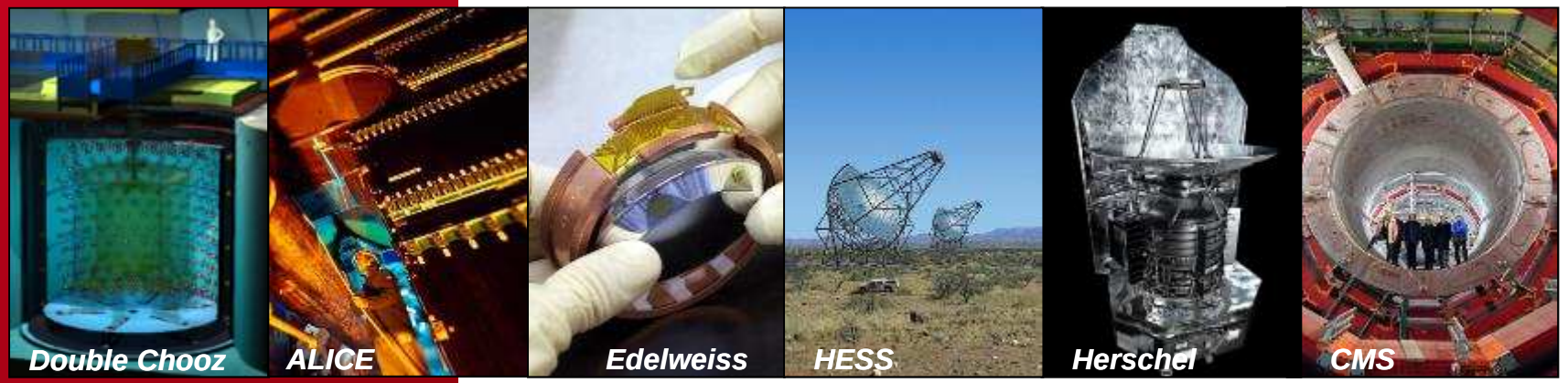
cea

TESLA TECHNOLOGY

TTC

COLLABORATION

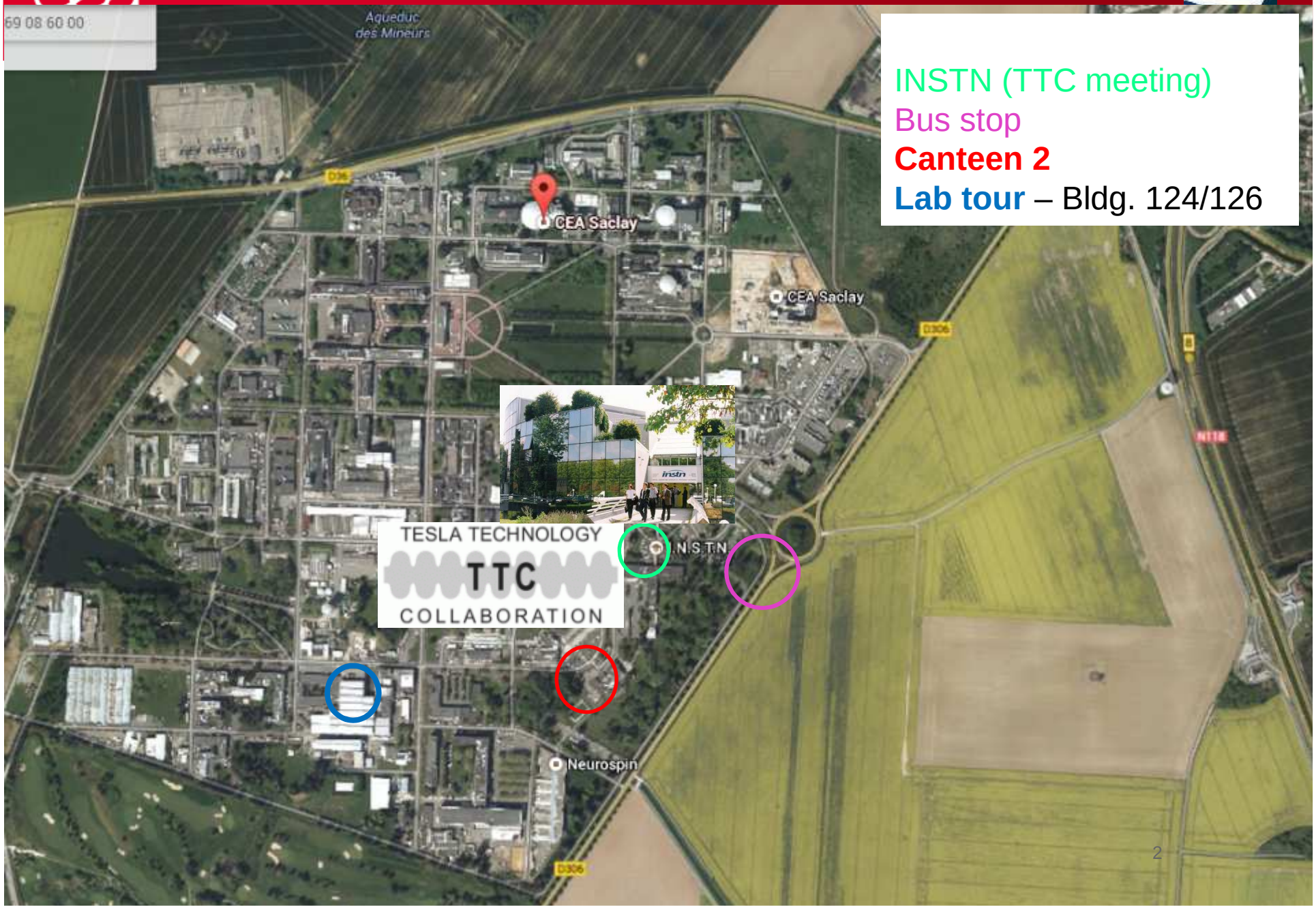
WELCOME TO TTC WORKSHOP AT CEA-SACLAY



Detecting radiations from the Universe.

www.cea.fr

Irfu


69 08 60 00
Aqueduc
des Mineurs
D36
CEA Saclay
CEA Saclay
D306
TESLA TECHNOLOGY
TTC
COLLABORATION
INSTN
Neurospin
D306
INSTN (TTC meeting)
Bus stop
Canteen 2
Lab tour – Bldg. 124/126

TTC2016 AT INSTN

INSTN stands for Institut National des Sciences et Techniques Nucléaires

Jules Horowitz (1921-1995) grew up in Poland and came to France. He studied at École polytechnique. He contributed to the nuclear research performed at Commissariat à l'énergie atomique (CEA) and, in 1970, created and was the first director of « l'institut de recherche fondamentale » of CEA now named Fundamental research department (Direction de la Recherche Fondamentale)

TTC 2016 :

- 127 participants (+ locals)
- 69 contributions

AGENDA TUESDAY MORNING

	Registration *INSTN Main Hall*	08:30 - 09:00
09:00	**CEA-Saclay welcome and logistics by Catherine MADEC** *Amphitheatre Jules Horowitz*	09:00 - 09:20
	Introduction and update from last collaboration meeting by Hasan PADAMSEE *Amphitheatre Jules Horowitz*	09:20 - 09:40
	E-XFEL Module completion and repair activities - O. Napoly (CEA) *Amphitheatre Jules Horowitz*	09:40 - 10:10
10:00	**European XFEL injector beam commissioning - P. Pierini (INFN)** *Amphitheatre Jules Horowitz*	10:10 - 10:40
	Coffee break	10:40 - 11:00
11:00	**Progresses at FNAL/JLAB on LCLSII modules - C. Ginsburg (FNAL)** *Amphitheatre Jules Horowitz*	11:00 - 11:30
	Construction progress of bERLinPro at HZB - A. Neumann (HZB) *Amphitheatre Jules Horowitz*	11:30 - 12:00
12:00	**Results of the Main linac module of the Cornell ERL - R. Eichhorn (Cornell)** *Amphitheatre Jules Horowitz*	12:00 - 12:30
	Lunch	

TUESDAY AFTERNOON & WEDNESDAY MORNING
WG1-WG2 PARALLEL SESSION

Group Photo
INSTN Main Hall 13:45 - 14:00

14:00

Working Group 1 (L. Lilje, J. Mammosser, H. Sakai)
Dr. Lutz Lilje, Dr. Hiroshi...

Working Group 2 (G. Devanz, R. Laxdal, P. Michelato)
Robert Laxdal, Dr. Paolo Mi...

15:00

16:00

17:00

Amphitheatre Jules Horowitz 14:00 - 17:30

14:00 - 17:30

09:00

Working Group 1 (L. Lilje, J. Mammosser, H. Sakai)
Mr. John Mammosser, Dr. Hir...

Working Group 2 (G. Devanz, R. Laxdal, P. Michelato)
Robert Laxdal, Dr. Paolo Mi...

10:00

11:00

12:00

Amphitheatre Jules Horowitz 09:00 - 12:30

Room 112 09:00 - 12:30

Lunch

WG1 & WG2

WG1: Performance Degradation and Cures (L. Lilje, J. Mammosser, H. Sakai)

The general aim of WG1 is to gather and analyze the recorded degradations (or improvements) between vertical cavity tests and cryomodule performance for major accelerator projects (both high and low beta). Also gather data on any further degradation (or improvement) in the beam line and over time.

Questions :

What are the dominant limiting aspects - field emission, quench, Q-degradation, administrative limits, something else?

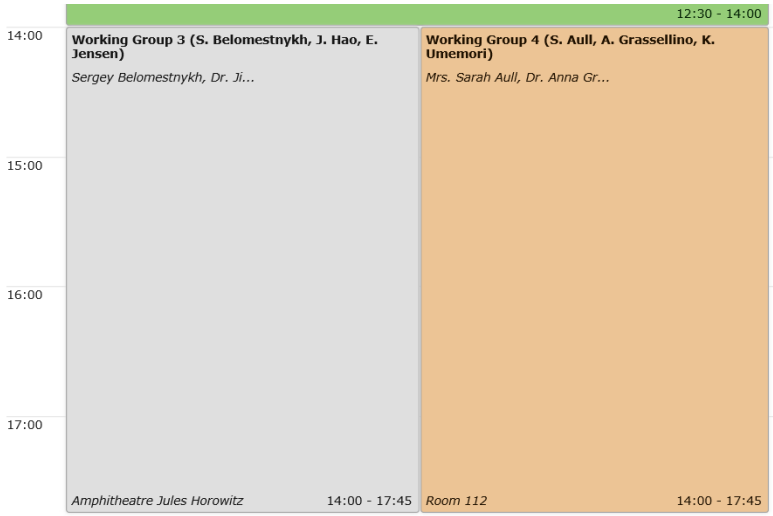
What measures have been tried to cure the degradations, and how successful are these attempts?

What efforts are underway or recommended to minimize contamination during cryomodule assembly and during connection to the beam line, such as particle-free vacuum components next to cold linac sections ?

WG2: Protons and Ions Accelerators (G. Devanz, R. Laxdal, P. Michelato)

Major initiatives are well underway for ion accelerators for nuclear astrophysics, such as FRIB, RAON and others. With the success of SNS, high intensity proton accelerator projects are progressing, such as ESS, PIP-II, IndianSNS, along with ADS ambitions, such as CADS and IADS. The aim of WG2 is to address the major on-going issues for each type of accelerator, how these issues are being addressed, as well as the needed developments. Demonstrated and needed advances in couplers and tuners for both accelerator classes should be included.

WEDNESDAY AFTERNOON & THURSDAY MORNING
WG3-WG4 PARALLEL SESSION



WG 3 & WG4

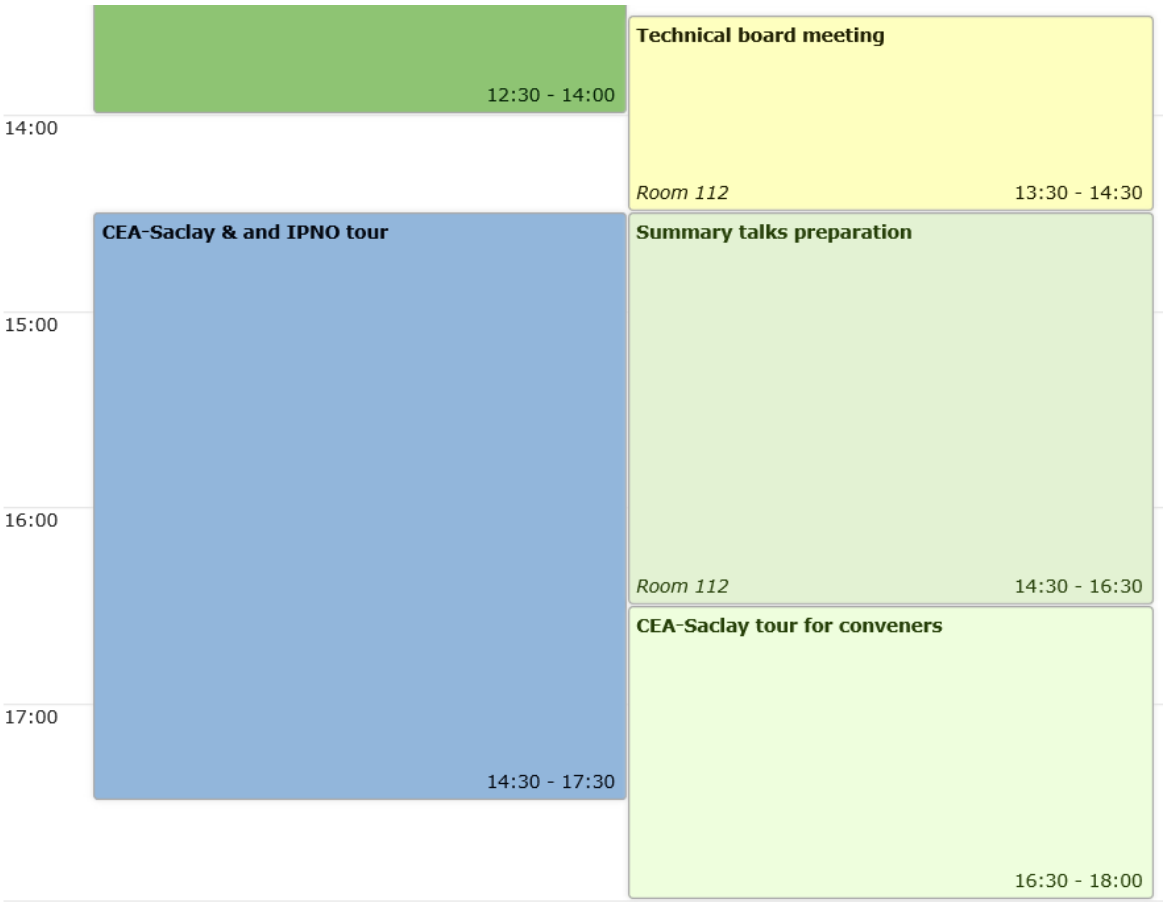
WG3: High current and CW accelerators (S. Belomestnykh, J. Hao, E. Jensen)

With growing interest in a future Higgs factory e+ e- collider - either via the ILC path or the FCC-ee path - co-chairs should identify the key issues for SRF for such accelerators, and encourage short presentations that address these issues. Similarly SRF for CW light sources such as ERLs have seen significant advances, so that major issues for this topic should be addressed. Include storage rings light sources issues as appropriate. Demonstrated and needed advances in couplers and tuners for both accelerator classes should be included.

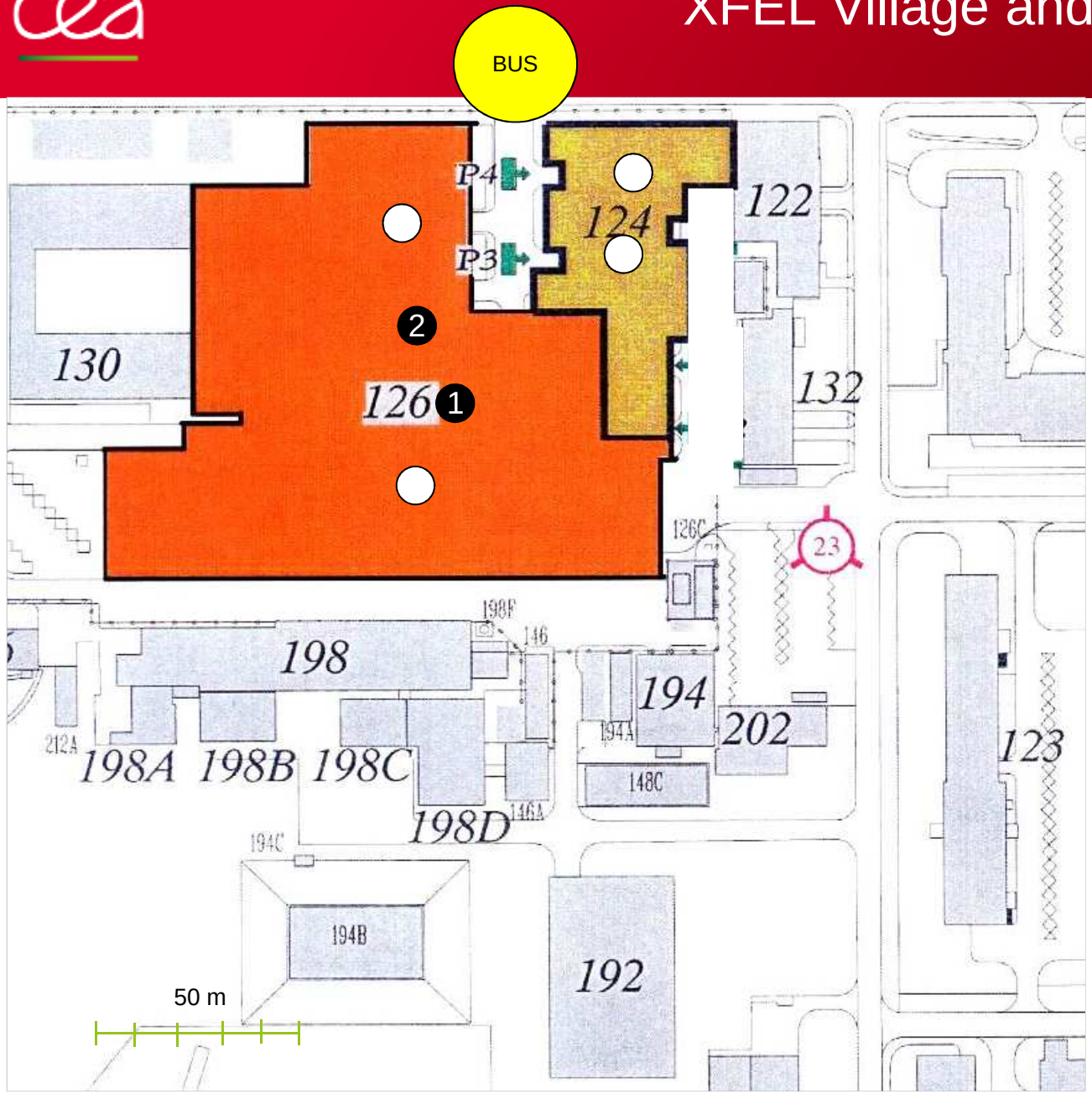
WG 4: The Performance Frontier (S. Aull, A. Grassellino, K. Umemori)

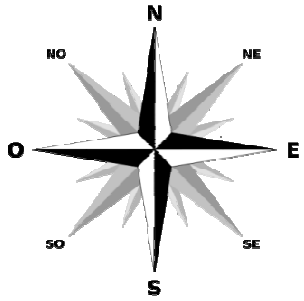
Three working groups have been active under the TTC umbrella: High Q for cryogenic cost reduction for CW accelerators at medium gradients, High Gradients with Nb and Nb3Sn, and Thin film Nb-Cu for cost reduction. Please include on-going efforts on composite Nb-Cu. Explorations at these frontiers will benefit medium-term and far-term future accelerators under discussion. Co-chairs should encourage presentations that will lead to a summary of on-going efforts underway for the three active WGs. Breakthroughs in these areas should get special attention. In your final summary please make an assessment of the probability of success for improved understanding, and highlight results for high Q, gradients > 50 MV/m and successful elimination of the Q-slope in Nb-Cu.

THURSDAY AFTERNOON



XFEL Village and IPNO visit





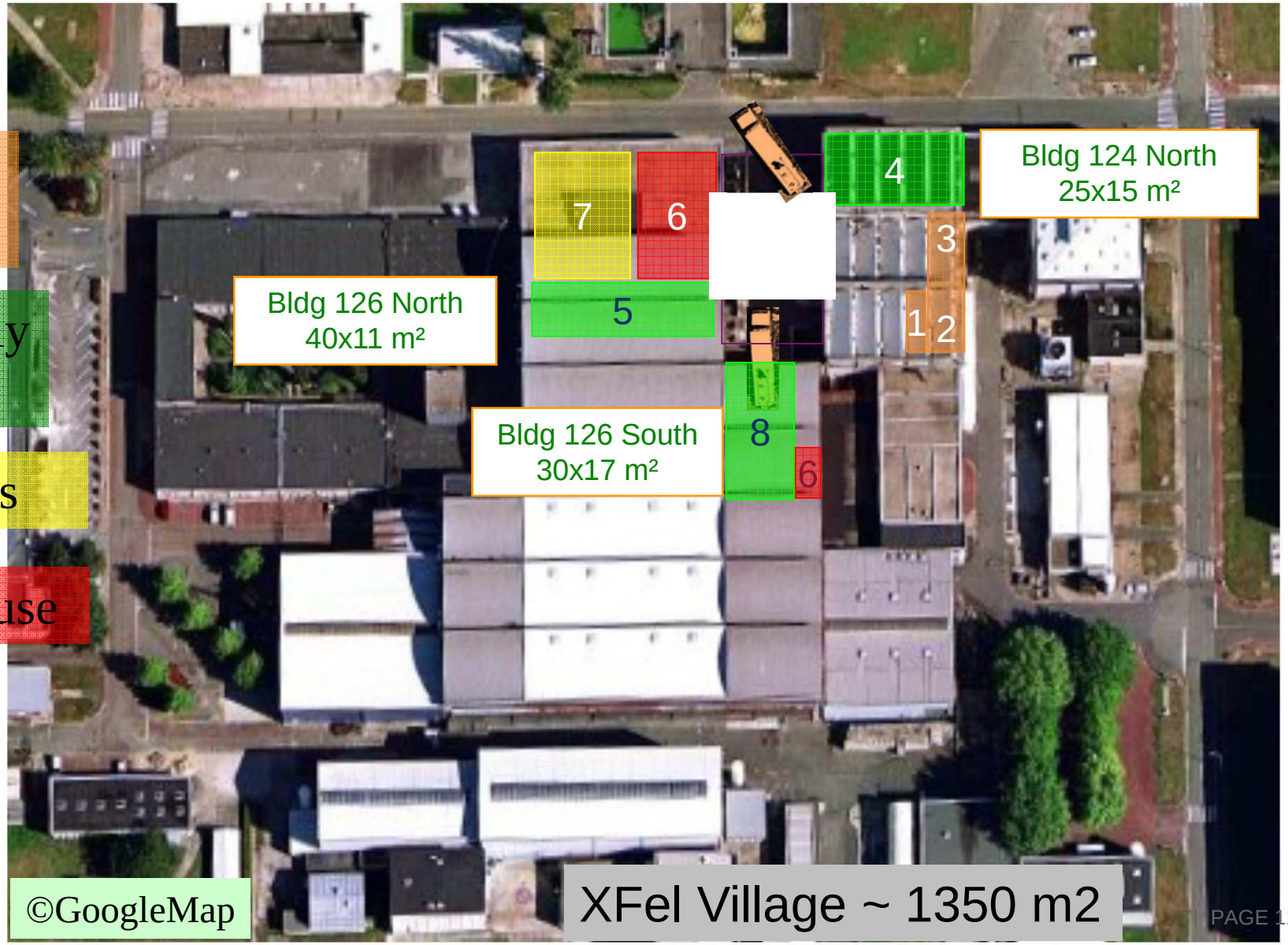
XFEL VILLAGE

Clean rooms

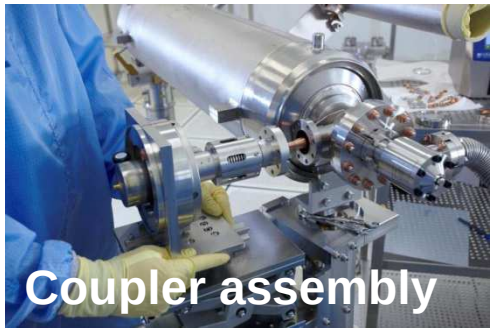
Assembly halls

Offices

Warehouse

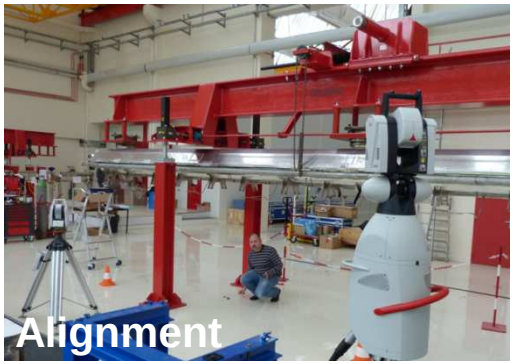


XFEL VILLAGE DETAILS

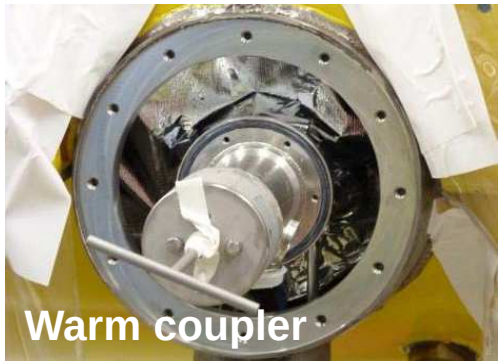

Coupler assembly


String assembly


Roll out


Alignment


Cantilever


Warm coupler

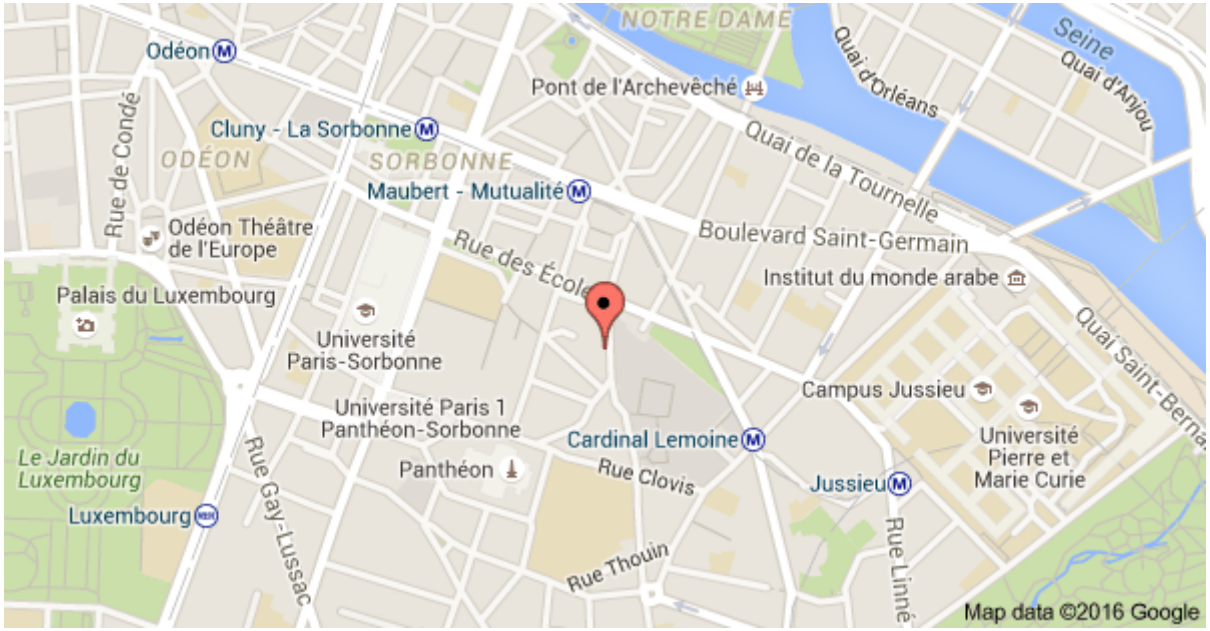

Final checks Shipment

103 XFEL cryomodules assembled –
During the tour, only the two last ones : XM100 & XM99

DINNER ON THURSDAY, JULY 7TH, 2016 AT 20:45

Dinner will take place at
« Au Bistrot de la Montagne » restaurant
38 & 40 rue de la Montagne Sainte-Geneviève, 75005 Paris

Nearest RER B station: Luxembourg (11 minutes walking)
Nearest Metro station: Maubert Mutualité (3 minutes walking)



FRIDAY MORNING

09:00	**Beam operatiotn status in CADS cryomodule at IMP/IHEP - S. Peng (IHEP)** *Room 112*	09:00 - 09:30
	Mass-production progress of FRIB low-beta cavities at MSU - K. Saito (MSU) *Room 112*	09:30 - 10:00
10:00	**Summary talk WG 1** *Room 112*	10:00 - 10:20
	Summary talk WG 2 *Room 112*	10:20 - 10:40
	Coffee break	10:40 - 11:00
11:00	**Summary talk WG 3** *Room 112*	11:00 - 11:20
	Summary talk WG 4 *Room 112*	11:20 - 11:40
	Technical Board report *Room 112*	11:40 - 11:50
	Collaboration Board report *Room 112*	11:50 - 12:05
12:00	**Closing** *Room 112*	12:05 - 12:20

HAVE A NICE AND FRUITFULL TTC MEETING