# **TESLA Technology Collaboration (TTC) Meeting**

# December 5-8, 2011, IHEP, Beijing, China

# Room A214, IHEP Main Building

### MONDAY, DECEMBER 5

	MONDAY, DECEMBER 5	
8:00	Registration, in front of Room A214 (until 12:00)	
Session	n 1:	
Openin	ng Plenary (welcome and introduction; status and progress reports for the regions)	
Part 1		Chair: Jie Gao (IHEP)
09:00	Welcome	Jie Gao (Chairman) Yi Fang Wang (IHEP Director)
09:10	Introduction and update since last meeting	Olivier Napoly (CEA, TTC Chair)
09:30	Chinese ADS accelerator status	Wei Min Pan (IHEP)
10:00	1.3 GHz SCRF activity on ERL at Peking University	Ke Xin Liu (PKU)
10:30	Status of XFEL Project	Hans Weise (DESY)
11:00	Coffee (30')	, , ,
Part 2		Chair: Olivier Napoly (CEA)
11:30	Overview of ERL projects: SRF issues and challenges (by Webex)	Matthias Liepe (Cornell Univ.)
12:00	Muon Acceleration Linacs: SRF issues and challenges (by Webex)	Fumio Furuta (Cornell Univ.)
12:30	Status of ILC: SRF issues and challenges	Akira Yamamoto (KEK)
13:00	Lunch (1h30', Guest House)	\
Session	, 2.	
	y (regional status)	Chair:
14:30	FRIB cavity status: SRF issues and challenges (by Webex)	John Popielarski (MSU)
15:00	Overview of the LHC SCRF systems (present and future): SRF issues and challenges	Edmond Ciapala (CERN)
15:30	IHEP 1.3 GHz SCRF technology development for ILC	Jie Gao (IHEP)
16:00	LHeC collider electron superconducting Linac: SRF issues and challenges	Daniel Schulte (CERN)
16:30	Coffee (30')	, ,
17:00	WG-1 Cryomodule Test Results and Analysis	Conveners WG-1
17:10	WG-2 Cavity material, fabrication, treatment and testing: new concepts and new benefits	Conveners WG-2
17:20	WG-3 Cryogenics and cryostats: savings in cryogenic power	Conveners WG-3
The state of the s		Conveners:
Session	13:	Claire Antoine (CEA)
WG-2 Cavity material, fabrication, treatment and testing: new concepts and new benefits		Camille Ginsburg (Fermilab)
		Tsuyoshi Tajima (KEK / LANL)
1. Niot	oium Material	
17:30	Chinese Nb production at NingXia	Hong Yun Zhao (OTIC)
18:00	Atmospheric surface treatments of Niobium	Enzo Palmieri (INFN)
	Status of KEK Cavity Fabrication Facility	Takayuki Saeki
1		i "
18:15	Status of KEK Cavity Fabrication Facility	Kenji Ueno (KEK)

		Conveners:
Session 3: WG-2 Cavity material, fabrication, treatment and testing: new concepts and new benefits		Claire Antoine (CEA)
		Camille Ginsburg (Fermilab)
		Tsuyoshi Tajima (KEK / LANL)
2. Alte	rnative materials and Nb films	
09:00	Nb <sub>3</sub> Sn (by Webex)	Matthias Liepe
09.00	No3Sii (by Webex)	Sam Posen (Cornell Univ.)
09:15	MgB <sub>2</sub> , Nb cathodic arc deposition and multilayers	Tsuyoshi Tajima (KEK)
09.13	lvigb <sub>2</sub> , two cathodic are deposition and muturayers	Claire Antoine (CEA)
09:35	Nb films prepared by HPIMS	Sergio Calatroni (CERN)
09:50	Discussion	
3. Mat	erials effects (special focus on $Q_0$ )	
10:00	Hydrides and HF rinse studies (by Webex)	Alex Romanenko (Fermilab)
10:20	Tumbling and hydrogen	Charlie Cooper (Fermilab)
10:35	Large-grain cavities	Waldemar Singer (DESY)
10:50	Coffee (30')	
4. Suri	Face treatments (special focus on $Q_0$ )	
11:20	Vertical EP	Fabien Eozenou (CEA)
11:35	BEP and cleaning with Gas Cluster Ion Beam	Andy Wu (JLAB)
11:55	Surface treatment studies at KEK	Hitoshi Hayano (KEK)
5. Test	s, tools	
12:15	Cavity inspection robot	Felix Schlander (DESY)
6. Cav	ity design	
12:30	SC RF gun with deposited lead photocathode	Jacek Sekutowicz (DESY)
12:45	Lunch (1h30', Guest House) / CB Meeting (Room A419	), lunch boxes)
	I	Conveners:
Session 4:		Paolo Pierini (INFN)
WG-3 Cryogenics and cryostats: savings in cooling power		Thomas Peterson (Fermilab)
	- J - G	Li Qiang Liu (TIPC)
14:15	Study of large cryogenic systems in China	Li Qiang Liu (TIPC)
14:45	Helium production and liquefaction (by Webex)	
	Cryogenics at the European Spallation Source ESS	Jean-Marc Bernhardt (Air Liquide
15:15		Wolfgang Hees (ESS)
15:35	Cryomodule Cooling - where the cryogenic cooling power is used?	Thomas Peterson (FNAL)
15:55	5 K radiation shield and thermal performance	Paolo Pierini (INFN)
16:15	Coffee (30')	
16:45	Thermal performance analysis and measurements of European XFEL prototype modules	Xilong Wang (DESY)
17:05	Magnetic shielding issues for high $Q_0$ (discussion)	
17:25	Conceptual Design of the Short Cryomodule for SPL	Eric Patxi Duthil (IPNO)
	XFEL module transport results transition to WG1	Kay Jensch Serena Barbanotti (DESY)
17:45		Selella Dalballotti (DES I)
17:45 18:05	discussion	Serena Barbanotti (DEST)

	WEDNESDAY, DECEMBER 7	
Session 5: WG-1 Cryomodule Test Results and Analysis		Conveners: Akira Yamamoto (KEK) Guillaume Olry (IPN Orsay) James Kerby (Fermilab)
1. Tun	ers and Lorentz force detuning	
08:20	Tuner performance with LLRF control at Fermilab	Yuriy Pischalnikov (Fermilab)
08:50	Tuner performance with LLRF control at KEK	Shin Michizono (KEK)
09:20	Comments on the blade type tuner performance	Carlo Pagani (INFN)
09:40	Comments on the slide-jack type tuner performance	Shuichi Noguchi (KEK)
10:00	discussion	
10:15	Coffee (30')	
2. Inpu	nt coupler designs and performances	
10:45	Input coupler assembly, and high-power and thermal performances at DESY	Wolf-Dietrich Moeller (DESY)
11:05	Input coupler assembly, and high-power and thermal performances at KEK	Eiji Kako (KEK)
11:25	Input coupler assembly, and high-power and thermal performances at Fermilab	Tug Arkan (Fermilab)
11:45	IFMIF power coupler for the HWR superconducting cavities	Hassen Jenhani (CEA-Saclay)
12:05	discussion	
12:20	Lunch (1h30', Guest House) / TB Meeting (Room A415	5, lunch boxes)
3. Cry	omodule assembly and associated issues	
13:50	Cavity-string alignment experience in the EXFEL prototype cryomodule assembly	Michel Fontaine (CEA-Saclay)
1.1.10	Magnetic shields inside and outside of LHe tank in S1-Global cryomodule	Eiji Kako (KEK)
14:10	assembly	Tug Arkan (Fermilab)
14:30	discussion	
4. Cav	ity gradient degradation experiences in cavity-string / cryomodule tests	
14:40	Cryomodule cold-test experience at ISAC2	Robert Laxdal (TRIUMF)
15:00	Cryomodule cold-test experience at SPIRAL2	Guillaume Olry (IPN-Orsay)
15:20	Coffee (30")	
15:50	Cavity-string / cryomodule cold-test experience at JLAB	Rong Li Geng (JLAB)
16:10	Gradient degradation experience at FLASH/PXFEL	Detlef Reschke (DESY)
16:30	Gradient degradation experience at NML	Elwin Harms (Fermilab)
16:50	Gradient degradation experience at S1-Global	Yasuchika Yamamoto (KEK)
17:10	discussion	
17:20	End 3rd Day's Program	ı
17:40	Banquet (Xi Yuan Hotel,西苑饭店, buses leave at 17:40 in front o	of IHEP main building)
	THURSDAY DECEMBER 8	~·
Session	ı 6:	Chair: W-D Möller (DESY)
Techni	cal Discussions (organized by the Technical Board)	Similar (DEST)
09:00	Gradient degradation in cryomodules: in depth discussions WG-1	WG-1 conveners
10:00	High $Q_0$ cavities: in depth discussions WG-2	WG-2 conveners
11:00	Coffee (30')	
Session	17: Closing	
11:30	Report from Collaboration Board	
11:55	Report from Technical Board	
12:20	Closing Remarks	
12:30	End of TTC Meeting (no lunch)	

## **General Information**

### • Registration

8:00-12:00, in front of Room A214, IHEP Main Building. After that, registration will move to Room C304 of the Main Building. A fee of 1200 CNY will be charged to cover organization expenses (lunches of Dec. 5-7, banquet, coffee breaks etc.). Only CNY cash payment is acceptable.

#### Internet Access

The wireless internet access will be available in the IHEP Main Building. Connect to the network "IHEP". Open your web browser and try to visit any website. You will be directed to the IHEP wireless network registration page. Click "visitor" in the left column. Fill in the form with the information below. You will be able to access the wireless network after the registration succeeds.

Purpose to visit IHEP: TTC2011

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Conference ID: t8i6g3b2

### • Website (program and talks download)

The meeting website is: <a href="http://indico.ihep.ac.cn/conferenceDisplay.py?confId=2240">http://indico.ihep.ac.cn/conferenceDisplay.py?confId=2240</a>
You can download the PPT or PDF files of the talks from the Timetable after each session. (http://indico.ihep.ac.cn/conferenceOtherViews.py?view=nicecompact&confId=2240)

#### Oral Presentation

It is suggested to copy the PPT or PDF file of your presentation to the computer before each session by the help of the conference secretary. The color of the name badge string of the conference secretaries is red.

#### Lunch

Lunches will be in the *Cafeteria of the Guest House*, Dec. 5-7. You will get three lunch tickets when register. Please show the lunch ticket when you enter the cafeteria.

## • Banquet

The Banquet will be held at *Xi Yuan Hotel* (西苑饭店) on the evening of Dec. 7. Two buses will leave at 17:40 in front of the IHEP Main Building. After banquet, one bus will return to Holiday Inn and Pullman, the other bus will return to IHEP.

#### Contact Persons

The conference secretariat is in Room C304, IHEP Main Building. Tel: 010-88235524.

For any information and help, please contact:

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