

15th Workshop on Breakdown Science and High Gradient Technology (HG2023)

Tuesday, 17 October 2023

Morning session: General & Highlights 1 (08:55 - 11:00)

-Conveners: Alessandro Gallo

time	[id] title	presenter
08:55	[142] LNF Director Welcome and General Information	GALLO, Alessandro BOSSI, Fabio
09:00	[56] Review of the gradient limits of copper	WUENSCH, Walter
09:20	[45] RF Structure for Eupraxia@SPARC_LAB: accelerating sections and waveguide components	CARDELLI, Fabio
09:40	[72] Short-pulse RF research at the AWA facility	Dr POWER, John
10:00	[39] Recent RF activities on high gradient technology at SSRF	TAN, Jianhao
10:20	[16] Fabrication and commissioning of the 1st high gradient (HG) module for the FERMI LINAC upgrade	SHAFQAT, NUAMAN
10:40	[43] High Efficiency X-band Traveling Wave Linac with Pulse-To-Pulse Tunable Energy	Dr DOLGASHEV, Valery

Morning session: General & Highlights 2 (11:30 - 13:30)

-Conveners: Emilio Nanni

time	[id] title	presenter
11:30	[46] Studies and commissioning results of the PolariX TDS system at SwissFEL	MARCELLINI, fabio
11:50	[23] High gradient challenges in normal conductive RF cavities	Dr GIOVE, Dario Augusto
12:10	[78] Technological challenges for the design and implementation of an X-band LLRF for a user facility linac	BELLAVEGLIA, Marco
12:30	[82] Using neural network and multi-objective algorithm to design variable polarization TDS with dual-mode	GONG, Hanyu
12:50	[22] Commissioning of X-band RF test stand facility at the University of Melbourne (X-LAB)	VOLPI, Matteo
13:10	[32] Status of Nextef2 at KEK	ABE, Tetsuo

Wednesday, 18 October 2023

Morning session: Projects (09:00 - 11:00)

-Conveners: Walter Wuensch

time	[id] title	presenter
09:00	[24] High-Gradient Booster Linac for Enhanced Proton Radiography at LANSCE	SIMAKOV, Evgenya
09:20	[27] Accelerator design studies for a compact, pulsed neutron facility optimised for analysis of battery and fuel cell electrodes	WROE, Laurence
09:40	[33] Progress of the Very-compact Inverse Compton gamma source in Tsinghua	SHI, Jiaru
10:00	[102] A Compact X-ray FEL project at Arizona State University	DOLGASHEV, Valery
10:20	[79] Smart*Light: A compact ICS source	MUTSAERS, Peter
10:40	[20] Cool Copper Collider	NANNI, Emilio

Morning session: Klystrons, LLRF and equipment (11:30 - 13:30)

-Conveners: Gerardo D'Auria

time	[id] title	presenter
11:30	[140] Design of S-band high efficiency klystron	WANG, Yiao
11:50	[34] Development of X-band accelerating tubes in Tsinghua	SHI, Jiaru
12:10	[26] Progress on high efficiency klystron for CEPC at IHEP	XIAO, Ouzheng
12:30	[52] Testing and Validation of High-Efficiency Klystron Technology: an 8MW X-band klystron	ALONSO ARIAS, Paz
12:50	[77] RF DESIGN OF THE PULSE COMPRESSION SYSTEM FOR THE KLYSTRON-BASED CLIC MAIN LINAC	WANG, Ping
13:10	[35] X-band Pulse Compressor schemes for TDS systems of S3FEL	LI, Zongbin

Thursday, 19 October 2023

Morning session: Injectors & C-band (09:00 - 11:00)

-Conveners: Tetsuo ABE

time	[id] title	presenter
09:00	[42] Construction and test of a high-gradient, high rep rate C-band RF Gun	ALESINI, David
09:20	[60] Towards high brightness accelerators ---- research of the cryogenic electron gun	WANG, Cheng
09:40	[63] A High Voltage DC GUN for a High Brightness Beams Test Facility	GIOVE, Dario Augusto
10:00	[68] Designing a PhotoCathode RF gun	HASHEMI, Seyedeh Sedigheh
10:20	[19] High Gradient Testing of C-band Structures and Components	NANNI, Emilio
10:40	[28] Update on high gradient C-band project at LANL	SIMAKOV, Evgenya

Morning session: C-band & Cryogenics (11:30 - 13:30)

-Conveners: LUIGI PALUMBO

time	[id] title	presenter
11:30	[37] Design and Prototyping of high-gradient C-band accelerating structures for a Very High Electron Energy linac for FLASH radiotherapy	GIULIANO, Lucia
11:50	[61] Developments of Dielectric-Assist Accelerating Structure at C-band and beyond	SATOH, Daisuke
12:10	[74] Study of cryogenic bi-periodic accelerating structure with TM02 mode and schematic design of the low temperature system	GAO, Zihe
12:30	[25] R&D of the C-band cryogenic copper parallel coupling accelerating structure at IHEP	ZHANG, Jingru
12:50	[76] Cryogenic high-gradient discharge system at Uppsala University.	JACEWICZ, Marek
13:10	[101] Ultra-compact X-ray Free-Electron Laser based on Cryogenic Copper	ROSENZWEIG, James

Friday, 20 October 2023

Morning session: X-band and beyond (09:00 - 11:00)

-Conveners: Jiaru Shi

time	[id] title	presenter
09:00	[40] MeV-scale simulations and fabrication tests of silicon slot and woodpile-based waveguides for Dielectric Laser Accelerators	TORRISI, Giuseppe
09:20	[41] The INFN MICRON project at LNF: Development of high-gradient metallic mm-wave accelerating structures.	FAILLACE, Luigi
09:40	[55] Rising the breakdown threshold in a sub-THz wakefield accelerator.	ZHOLENTS, Alexander
10:00	[146] High electric field induced damages by coherent THz pulses: a new technique to test breakdown phenomena	MACIS, Salvatore
10:20	[54] Simulations design of high-gradient structures for HALF	WEI, Yelong
10:40	[64] Status of the SLAC/INFN-LNF/KEK collaboration on the development and testing of high-gradient X-band accelerating structures	FAILLACE, Luigi

Morning session: HG in the context of the European Strategy Accelerator R&D and CONCLUSIONS (11:30 - 13:20)

-Conveners: Valery Dolgashev

time	[id] title	presenter
11:30	[126] HG in the context of the accelerator R&D for the European Strategy for HEP	BISOFFI, Giovanni
11:55	[38] European Strategy for Particle Physics - RF-related Surveys	ALESINI, David SYRATCHEV, Igor WUENSCH, Walter
12:20	[148] Discussion	
12:50	[128] Final Remarks	GALLO, Alessandro