



12th International Workshop on RF Superconductivity

Cornell University, Ithaca, New York, USA - July 10-15, 2005

SRF2005 workshop program: July 10th, 2005 - July 15th, 2005

Sunday, July 10th

	Tutorials (155 Olin Hall) <i>Session Chair: M. Liepe (Cornell)</i> <i>Session secretaries: A. Romanenko (Cornell), M. Gusarova (MEPHI)</i>	Parallel Tutorials (255 Olin Hall) <i>Session Chair: J. Delayen (JLab)</i> <i>Session secretaries: G. Ereemeev (Cornell), A. Dangwal (U. of Wuppertal)</i>
9:00AM - 9:50AM	Basic principles of SRF <i>K. Saito (KEK)</i>	-
10:00AM - 11:00AM	High-beta cavity design <i>S. Belomestnykh and V. Shemelin (Cornell)</i>	Low-beta cavity design <i>A. Facco (INFN-LNL)</i>
11:00AM -12:00PM	Input couplers for superconducting cavities - design and test <i>W. Moeller (DESY)</i>	The Nb-oxide system <i>J. Halbritter (Karlsruhe)</i>
12:00PM - 1:30PM	Lunch (on your own)	
	<i>Session Chair: A. Facco (INFN-Legnaro)</i> <i>Session secretaries: E. Watson (Cornell), P. Sekalski (DMCS-TUL / DESY)</i>	<i>Session Chair: K. Saito (KEK)</i> <i>Session secretaries: J. Silterra (Cornell), D. Tonini (INFN-LNL)</i>
1:30PM - 2:20PM	Ponderomotive instabilities and microphonics <i>J. Delayen (JLab)</i>	Cleanliness techniques <i>D. Reschke (DESY)</i>
2:30PM - 3:30PM	Theory and practice of cavity test systems <i>T. Powers (JLab)</i>	Cryomodule design, assembly, alignment <i>C. Pagani (DESY/INFN-Milano)</i>
3:30PM - 4:00PM	Transport to Cayuga Lake	
4:00PM - 6:00PM	Boat tour on Cayuga Lake	
6:00PM - 6:30PM	Transport to Cornell	
6:30PM - 9:30PM	Welcome Reception (Willard Straight Memorial Room)	



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Monday, July 11th 2005

	<p align="center">Plenary Workshop Opening (155 Olin Hall)</p> <p align="center"><i>Session Chair: D. Proch (DESY)</i></p> <p align="center"><i>Session secretaries: B. Stuhl (Cornell), Z. Conway (U. of Illinois Urbana-Champaign)</i></p>
9:00AM - 9:10AM	<p>Welcome</p> <p><i>M. Tigner (Cornell)</i></p>
9:10AM - 9:25AM	<p>Logistics</p> <p><i>S. Belomestnykh (Cornell)</i></p>
9:25AM - 10:00AM	<p>Introduction - SRF: Two hectic years</p> <p><i>H. Padamsee (Cornell)</i></p>
	<p align="center">New Projects In-Stream</p> <p align="center"><i>Session Chair: C. Pagani (DESY/INFN-Milano)</i></p> <p align="center"><i>Session secretaries: R. Calaga (BNL), M. Delheusy (Max-Planck-Institute fuer Metallforschung / CEA)</i></p>
10:00AM - 10:30AM	<p>Status of SNS</p> <p><i>I. Campisi (ORNL/SNS)</i></p>
10:30AM - 11:00AM	Coffee break
11:00AM - 11:30AM	<p>Status of TTF</p> <p><i>L. Lilje (DESY)</i></p>
11:30AM - 12:00PM	<p>A 100 MV cryomodule for CW operation</p> <p><i>C. Reece (JLab)</i></p>
12:00PM - 12:30PM	<p>SRF in storage rings</p> <p><i>M. Pekeler (ACCEL)</i></p>
12:30PM - 2:00PM	Lunch (on your own)
	<p align="center">Advances in SRF Technology - I</p> <p align="center"><i>Session Chair: K. Shepard (ANL)</i></p> <p align="center"><i>Session secretaries: P. Quigley (Cornell), M. Souli (IPN Orsay)</i></p>
2:00PM - 2:20PM	<p>Structures for RIA and FNAL booster</p> <p><i>M. Kelly (ANL)</i></p>
2:20PM - 2:35PM	<p>SPIRAL-2 resonators</p> <p><i>G. Devanz (CEA-Saclay)</i></p>
2:35PM - 2:50PM	<p>The HW resonators in Juelich</p> <p><i>R. Stassen (FZ-Juelich)</i></p>
2:50PM - 3:05PM	<p>Niobium sputtered QW resonators</p> <p><i>A. Porcellato (INFN-LNL)</i></p>



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3:05PM - 3:20PM	Superconducting RFQs <i>G. Bisoffi (INFN-LNL)</i>
3:20PM - 3:35PM	Recent progress in the superconducting RF program at TRIUMF/ISAC <i>R. Laxdall (TRIUMF)</i>
3:35PM - 3:50PM	Coffee break
	<i>Session Chair: L. Lilje (DESY)</i> <i>Session secretaries: J. Sears (Cornell), H. Jenhani (LAL Orsay)</i>
3:50PM - 4:10PM	Performance of medium-beta elliptical cavities <i>J. Ozelis (JLab)</i>
4:10PM - 4:30PM	Physical and mechanical properties of single and large crystal high-RRR niobium <i>G. Myneni (JLab)</i>
4:30PM - 4:45PM	Performance of large grain and single crystal niobium cavities <i>P. Kneisel (JLab)</i>
4:45PM - 5:05PM	Seamless/bonded niobium cavities <i>W. Singer (DESY)</i>
5:05PM - 5:25PM	Progress on Nb-Cu coating techniques <i>S. Calatroni (CERN)</i>
5:25PM - 5:45PM	High-Tc: New developments & progress on understanding the mechanisms & hope for the future <i>T. Tajima (LANL)</i>
5:45PM - 6:00PM	Transport to Cayuga Lake
6:00PM - 7:30PM	First Boat Tour
7:30PM - 9:00PM	Second Boat Tour



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Tuesday, July 12th 2005

	<p align="center">Basic SRF Topics (155 Olin Hall) <i>Session Chair: P. Kneisel (JLab)</i> <i>Session secretaries: M. Souli (IPN Orsay), M. Meidlinger (MSU)</i></p>
8:30AM - 9:00AM	<p>Theoretical advances in SRF <i>A. Gurevich (University of Wisconsin)</i></p>
9:00AM - 9:20AM	<p>Advancements in comprehension of the Q-slope for superconducting cavities <i>E. Palmieri (INFN-LNL)</i></p>
9:20AM - 9:50AM	<p>Review of Frontier Workshop and Q-slope results <i>G. Ciovati (JLab)</i></p>
9:50AM - 10:10AM	<p>Review of new shapes for higher gradient <i>R. Geng (Cornell)</i></p>
10:10AM - 10:30AM	<p>Coffee break</p>
	<p align="center">Students/Young Researchers <i>Session Chair: E. Palmieri (INFN-Legnaro)</i> <i>Session secretaries: S. Musser (MSU), H. Jiang (MSU)</i></p>
10:30AM - 10:45AM	<p>Design & prototype of a high current multi-cell elliptical cavity <i>D. Meidlinger (MSU)</i></p>
10:45AM - 11:00AM	<p>Pulsed-operation of SC spoke cavities <i>Z. Conway (University of Illinois Urbana-Champaign)</i></p>
11:00AM - 11:15AM	<p>ERL 5-cell cavity design for high currents <i>R. Calaga (BNL)</i></p>
11:15AM - 11:30AM	<p>New Results on High Field Q-slope <i>G. Eremeev (Cornell)</i></p>
11:30AM - 11:45AM	<p>SC Cavities at 3.9 GHz <i>T. Koeth(FNAL)</i></p>
11:45AM - 12:00PM	<p>Surface studies of niobium chemically polished under conditions for SRF cavity production <i>H. Tian (JLab)</i></p>
12:00PM - 12:15PM	<p>General Automation of LLRF Control for Superconducting Accelerators <i>A. Brandt (DESY)</i></p>
12:15PM - 12:30PM	<p>New magnetron configurations for Nb onto Cu <i>G. Lanza (INFN-LNL)</i></p>
12:30PM - 12:45PM	<p>A-15 superconductors - Alternative to niobium for RF cavities <i>S. Deambrosis (INFN-LNL)</i></p>



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12:45PM - 1:00PM	Flux gate magnetometry applied to cavities <i>C. Bonavolontà (INFN-LNL)</i>
1:00PM - 1:15PM	Input coupler development for superconducting cavity 500kW CW power feed <i>M. Gusarova (MEPHI)</i>
1:15PM - 1:30PM	Piezoelectric stack based system for Lorentz force compensation <i>P. Sekalski (DMCS-TUL / DESY)</i>
1:30PM - 2:15PM	Lunch (on your own)
2:15PM - 5:15PM	Poster Session (Willard Straight Hall Memorial Room)
5:30PM - 7:00PM	Industrialization Symposium (155 Olin Hall) <i>Organized by D. Proch (DESY)</i>
	Part 1: Presentation of past, ongoing or planned laboratory activities for industrialization
	a) CERN (LHC)
	b) DESY (XFEL) - <i>cavity fabrication & treatment - D. Proch (DESY)</i> - <i>input coupler - T. Garvey (IN2P3)</i> - <i>module assembly - B. Petersen (DESY)</i>
	c) KEK
	d) FNAL activities towards industrialization - <i>N. Lockyer (FNAL)</i>
	Comments by industry - <i>all</i>
	Part 2: Presentation/information about existing "Industry Forum"
	a) Linear Collider forum of Japan - <i>N. Nishi (LCF of Japan)</i>
	b) Linear Collider forum of Europe - <i>M. Peiniger (ACCEL)</i>
	c) Formation of an US industrial consortium for ILC - <i>T. Favale (AES)</i>
	Part 3: Open discussion about best coordinated way to industrialization of SRF technology
	Contributions by industry and laboratory partners
	Part 4: Conclusions and outlook
7:30PM	Free Concert (Performing Arts Center)



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Wednesday, July 13th 2005

	Moderated Discussions on Hot Topics (155 Olin Hall) <i>Session secretaries: D. Tonini (INFN-LNL), D. Meidlinger (MSU)</i>
8:30AM - 9:30AM	Topic 1: High-field Q-slope <i>Moderator: P. Kneisel (JLab)</i>
9:30AM - 10:30AM	Topic 2: Surface Analysis <i>Moderator: C. Antoine (CEA-Saclay)</i>
10:30AM - 11:00AM	Coffee break
11:00AM - 12:30PM	Topic 3: Spoke vs Elliptical cavities for $\beta = 0.5$ <i>Moderator: F. Krawczyk (LANL)</i>
12:30PM - 2:00PM	Lunch (on your own)
2:00PM - 5:00PM	Watkins Glen Outing
6:00PM - 8:30PM	Taughannock State Park: Barbeque/Volleyball/Badminton/Frisbee



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Thursday, July 14th 2005

	Advances in SRF Technology - II (155 Olin Hall) <i>Session Chair: S. Noguchi (KEK)</i> <i>Session secretaries: J. Silterra (Cornell), P. Sekalski (DMCS-TUL / DESY)</i>
8:30AM - 9:00AM	Superconducting RF Test Facility (STF) in KEK <i>H. Hayano (KEK)</i>
9:00AM - 9:30AM	Results from the new linear collider test facility at Fermilab <i>H. Edwards (Fermilab)</i>
9:30AM - 10:00AM	Review of various approaches to address high currents in SRF electron linacs <i>I. Ben-Zvi (BNL)</i>
10:00AM - 10:30AM	A Review of the design and performance of CW and pulsed high power couplers <i>T. Garvey (LAL-Orsay)</i>
10:30AM - 11:00AM	Coffee break
	<i>Session Chair: I. Ben-Zvi (BNL)</i> <i>Session secretaries: A. Romanenko (Cornell), Z. Conway (U. of Illinois Urbana-Champaign)</i>
11:00AM - 11:20AM	Advances in electromagnetic modeling through high performance computing <i>K. Ko (SLAC)</i>
11:20AM - 11:40AM	Review of superconducting RF guns <i>D. Janssen (FZ-Rosendorf)</i>
11:40AM - 12:00PM	Review of slow and fast tuners <i>S. Simrock (DESY)</i>
12:00PM - 12:20PM	Review on progress in RF control systems <i>M. Liepe (Cornell)</i>
12:20PM - 12:40PM	Crab cavity development <i>K. Hosoyama (KEK)</i>
12:40PM - 1:00PM	Summary of Industrialization Symposium <i>D. Proch (DESY)</i>
1:00PM - 2:00PM	Lunch (on your own)
2:00PM - 5:30PM	Poster Session (Willard Straight Hall Memorial Room)
6:00PM - 7:00PM	Reception at Johnson Art Museum
7:00PM - 10:00PM	Banquet at Statler Hotel



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Friday, July 15th 2005

	<p align="center">Future Facilities (155 Olin Hall)</p> <p align="center"><i>Session Chair: N. Lockyer (University of Pennsylvania)</i></p> <p align="center"><i>Session secretaries: G. Ereameev (Cornell), M. Delheusy (Max-Planck-Institute fuer Metallforschung / CEA)</i></p>
8:30AM - 8:55AM	<p>The Rare Isotope Accelerator (RIA)</p> <p><i>R. York (MSU)</i></p>
8:55AM - 9:20AM	<p>Proton driver</p> <p><i>W. Foster (Fermilab)</i></p>
9:20AM - 9:45AM	<p>European RIB</p> <p><i>M. Di Giacomo (GANIL)</i></p>
9:45AM - 10:10AM	<p>ERL workshop review</p> <p><i>M. Dykes (ASTeC Daresbury)</i></p>
10:10AM - 10:35AM	<p>Future FELs</p> <p><i>J. Corlett (Berkley)</i></p>
10:35AM - 11:00AM	<p>European X-FEL Project</p> <p><i>K. Floettmann (DESY)</i></p>
11:00AM - 11:15AM	Coffee break
	<p align="center">ILC fest</p> <p align="center"><i>Session Chair: H. Edwards (Fermilab)</i></p> <p align="center"><i>Session secretaries: B. Stuhl (Cornell), E. Watson (Cornell)</i></p>
11:15PM - 11:30PM	<p>Accelerator physics challenges of the ILC</p> <p><i>G. Dugan (Cornell)</i></p>
11:30PM - 12:00PM	<p>Challenges of International Collaboration</p> <p><i>M. Tigner (Cornell)</i></p>
12:00PM - 12:30PM	<p>GDE expectations from SRF community</p> <p><i>B. Barish (Caltech)</i></p>
12:30PM - 1:00PM	Awards/Closing
1:00PM - 3:00PM	Lunch (on your own)
3:00PM - 5:00PM	CESR/SRF Tours (on request)