

E-CLOUD04 Schedule and Agenda

version 8 (April 16, 2004)

Monday April 19, 2004

Session A: Observations at Existing Accelerators (Chair, M. Blaskiewicz; Secretary, J. Byrd)

08:15-08:30	Welcome (15 minutes)	R. Gough, LBNL
08:30-08:40	Goals for the Workshop (10)	M. Furman, LBNL
08:40-09:10	Summary of Pressure Rise Workshop (30)	S.Y. Zhang, BNL
09:10-09:45	Electron Cloud Observations: A Retrospective (35)	K. Harkay, ANL
09:45-10:15	Electron cloud effects in the KEKB LER (30)	H. Fukuma, KEK
10:15-10:35	BREAK	
10:35-11:05	Suppression of the beam instability related to the electron cloud at PEP-II B-factory (30)	A. Kulikov, SLAC
11:05-11:35	The Electron Cloud Instability Studies in the BEPC (30)	J. Wang, IHEP
11:35-12:05	Beam observations with electron cloud in the CERN-PS & SPS Complex (30)	G. Arduini, CERN
12:05-12:30	DISCUSSION (25)	
12:30-13:30	LUNCH	

Session B: More Observations at Existing Accelerators and Concerns for Future Machines (Chair, K. Harkay; Secretary, V. Baglin)

13:30-14:00	Electron cloud and Vacuum effects in the SPS (30)	J. M. Jiménez, CERN
14:00-14:20	Experimental and Simulation Studies of Electron Cloud Multipacting in the Presence of Small Solenoidal Fields (20)	A. Novokhatski, SLAC
14:20-14:50	Electron Clouds and vacuum pressure rise in RHIC (30)	W. Fischer, BNL
14:50-15:20	Experimental studies of electron and gas sources in a heavy-ion beam (30)	A. Molvik, LLNL
15:20-15:50	BREAK	
15:50-16:20	Experimental Studies of Electron Cloud Effects at the Los Alamos PSR: a Status Report (30)	R. Macek, LANL
16:20-16:50	Electron cloud effects in the J-PARC rings and related topics (30)	T. Toyama, KEK
16:50-17:10	Analysis of the Electron Pinch during a Bunch Passage (20)	E. Benedetto, CERN
17:10-17:30	Unexpected Results on Microwave Waveguide Mode Transmission Measurements in the SPS Beam-pipe (20)	T. Kroyer, CERN
17:30-18:15	DISCUSSION (45)	

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Tuesday April 20, 2004

Session C: Surface Properties, Measurements and Treatments (Chair, M. Pivi; Secretary, F. Le Pimpec)

08:00-08:30	Vacuum and electron cloud issues at the GSI present and future facilities (30)	G. Rumolo, GSI
08:30-09:00	Surface related properties as an essential ingredient to e-cloud simulations (30)	R. Cimino, LNF-INFN
09:00-9:30	Instrumental Effects in Secondary Electron Yield and Energy Distribution Measurements (30)	R. Kirby, SLAC
09:30-10:00	SEY and electron cloud build-up with NEG materials (30)	A. Rossi, CERN
10:00-10:30	BREAK	
10:30-11:00	Design and Implementation of SNS Accumulator Ring Vacuum System with Suppression of Electron Cloud Instability (30)	H. Hseuh, BNL
11:00-11:30	Experimental Results of a LHC Type Cryogenic Vacuum System Subjected to an Electron Cloud (30)	V. Baglin, CERN
11:30-11:50	Suppression of the effective SEY for a grooved metal surface (20)	G. Stupakov, SLAC
11:50-12:30	DISCUSSION (40)	
12:30-13:30	LUNCH	

Session D: Simulations of E-Cloud Buildup I (Chair, G. Rumolo; Secretary, Y. Cai)

13:30-14:00	Electron Cloud Build-Up Simulations with E-CLOUD (30)	D. Schulte, CERN
14:00-14:30	Numerical and Computational Methods in Electron Cloud Simulations: Present and Future (30)	A. Adelman, PSI
14:30-15:00	Overview and Actual Understanding of the Electron Cloud Effects and Instabilities in Future Linear Colliders (30)	M. Pivi, SLAC
15:00-15:20	Prediction of Electron Cloud Effects in Synchrotron Light Source PETRA III. (20)	R. Wanzenberg, DESY
15:20-15:50	BREAK	
15:50-16:10	E-cloud simulations for DAFNE (20)	C. Vaccarezza, LNF-INFN
16:10-16:30	Electron Cloud Effects in the TESLA and CLIC Positron Damping Rings (20)	R. Wanzenberg, DESY
16:30-16:50	Status report on the merging of electron-cloud code POSINST with 3-D accelerator PIC code WARP (20)	J.-L. Vay, LBNL
16:50-17:20	Simulation of electron cloud build-up in the ISIS proton synchrotron and related machines (30)	G. Bellodi, RAL
17:20-17:30	Effect of the beam instability on the density of the cloud/ Secondary yield in the presence of the beam (10)	S. Heifets, SLAC
17:30-18:15	DISCUSSION (45)	

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Wednesday April 21, 2004

Session E: Simulations of E-Cloud Buildup II (Chair, D. Schulte; Secretary, J.-L. Vay)

08:00-08:30	Multipacting and remedies of electron cloud in long bunch proton machine (30)	L. Wang, BNL
08:30-09:00	Electron-Cloud Module for the ORBIT Code (30)	A. Shishlo, ORNL
09:00-09:20	Simulation of the Electron Cloud Effects for the SNS Ring (20)	Y. Sato, IU/ORNL
09:20-09:40	Energy Structure of Electron Cloud (20)	L. Wang, BNL
09:40-10:00	Solenoid effects on electron cloud (20)	L. Wang, BNL
10:00-10:30	BREAK	
10:30-11:00	Simulations of e-cloud for Heavy Ion Fusion (30)	R. Cohen, LLNL/LBNL
11:00-11:20	The CMEE Library for Numerical Modeling of Electron Effects (20)	P. Stoltz, Tech-X Corp.
11:20-11:40	Use of maps for exploring electron cloud parameter space (20)	U. Iriso, BNL
11:40-12:20	DISCUSSION (40)	
12:30-13:30	LUNCH	
14:30-21:00	Winery Tour and Banquet	

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Thursday April 22, 2004

Session F1: Theory and Simulations of Electron Cloud Instabilities I (Chair, A. Wolski; Secretary, G. Arduini)

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| 08:00-08:30 | Review of Single-Bunch Instabilities Driven by an Electron Cloud (30) | F. Zimmermann, CERN |
| 08:30-09:00 | Study of coupled bunch instability caused by electron cloud (30) | K. Ohmi, KEK |
| 09:00-09:30 | A 3-D Parallel simulation Model of Continuous Beam-Cloud Interactions (30) | A. Ghalam, USC |
| 09:30-10:00 | Simulation of Transverse Single Bunch Instabilities and Emittance Growth caused by Electron Cloud in LHC and SPS (30) | E. Benedetto, CERN |
| 10:00-10:40 | BREAK | |

Session F2: Theory and Simulations of Electron Cloud Instabilities II and other topics (Chair, F. Zimmermann; Secretary, W. Fischer)

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| 10:40-11:00 | Ion trapping in the Fermilab Recycler Ring (20) | K. Y. Ng, FNAL |
| 11:00-11:20 | Electron cloud effects in a coasting proton beam (20) | K. Ohmi, KEK |
| 11:20-11:50 | Interplay of electron cloud and impedance in an analytical model (30) | K. Cornelis, CERN |
| 11:50-12:20 | Instability dynamics with electron cloud buildup in long bunches (30) | M. Blaskiewicz, BNL |
| 12:30-13:30 | LUNCH | |
| 13:30-14:00 | Delta-f Simulations of Electron-Ion Two-Stream Instability (30) | H. Qin, PPPL |
| 14:00-14:20 | Correlation of Pressure Rise and Experimental Backgrounds at RHIC in Run04 (30) | A. Drees, BNL |
| 14:20-14:40 | Electron cloud effects in JLC damping ring II (30) | K. Ohmi, KEK |
| 14:40-15:00 | Centroid Theory of Transverse Electron-Proton Instability in a Long Proton Bunch Revisited: An Erratum (20) | T. Wang, LANL |
| 15:00-15:30 | BREAK | |
| 15:30-16:30 | DISCUSSION for Session F1&F2 (60) | |

Session G Panel Discussion on Future Needs and Future Directions (Chair and panel moderator, R. Macek; Secretary, A. Drees)

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| 16:30-18:00 | Panel: J. Seeman, K. Ohmi, H. Fukuma, F. Zimmermann, M. Jiménez, R. Cimino, G. Rumolo, S. Henderson, A. Molvik, S. Y. Zhang | |
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Friday April 23, 2004

Session H: Summaries (Chair, C. Prior; Secretary, G. Bellodi)

08:00-08:30	Session A summary (30)	M. Blaskiewicz, BNL
08:30-09:00	Session B summary (30)	K. Harkay, ANL
09:00-09:30	Session C summary (30)	M. Pivi, SLAC
09:30-10:00	Session D summary (30)	G. Rumolo, GSI
10:00-10:30	BREAK	
10:30-11:00	Session E summary (30)	D. Schulte, CERN
11:00-11:45	Session F1&F2 summary (45)	A. Wolski, LBNL/F. Zimmermann, CERN
11:45-12:25	Discussion (40)	
12:25-12:30	Closing Remarks (5)	M. Furman, LBNL