ECLOUD'18 (03-07 June 2018)

Sunday, 3 June 2018

**ECE on Beam Dynamics: observations and prediction (I)** - FRANK ZIMMERMANN (CERN)

08:30 E-cloud Effects in CERN accelerator Complex - Giovanni Rumolo (CERN)

09:00 Coupled-bunch instabilities and related effects due to electron cloud in SuperKEKB LER - MAKOTO TOBIYAMA (KEK Accelerator Laboratory)

09:30 E-cloud observations and simulation at J-PARC - Kazuhito Ohmi (KEK)

10:00 Positron vs electron Beam behavior at PETRA - Rainer Wanzenberg (DESY)

10:20 --- Coffee break ---

**ECE on Beam Dynamics: observations and prediction (II)** - Giovanni Iadarola (CERN)

10:50 Measurements and simulations of electron-cloud-induced tune shifts and emittance growth at CesarTA - Stephen Poprocki (Cornell University)

11:20 RHIC instabilities at transition crossing (su) - Xiaofeng Gu (Brookhaven National Lab)

11:50 Electron cloud challenges for future circular machines - Lotta Mether (EPFL)

12:20 Investigating the role of photoemission in the e-cloud formation at the LHC - Philipp Dijkstra (Paul Scherrer Institut)

12:40 E-cloud studies for FCC-hh - Daria Astapovych (TU Darmstadt)

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**Surface properties, coating and experimental studies (I)** - Rosanna Larciprete (CNR-ISC/LNF-INFN)

08:30 SEY: what we know and what we still need to know - Mauro Taborelli (CERN)

09:00 SEY measurements of coated surfaces with different coating thickness - Eleonora Belli (CERN)

09:20 Characterisation of beam screens extracted from LHC magnets - Valentine Petit (CERN)

09:40 SEY studies at CSNS - Shenghua Liu (Institute of High Energy Physics, Chinese Academy of Sciences)

10:00 Stainless Steel SEY: A controversial story - Roberto Cimino (LNF)

10:10 SEY from noble metals - Luis Antonio Gonzalez Gomez (LNF)

10:30 --- Coffee break ---

**Surface properties, coating and experimental studies (II)** - Mauro Taborelli (CERN)

11:00 A surface Science approach to SEY studies - Rosanna Larciprete (CNR-ISC/LNF-INFN)

11:20 Photo reflectivity and PEY of technical surfaces - Andrea Liedl (LNF)

11:40 Photons Interaction with technical surfaces - Marco Angelucci (LNF)

12:00 Low SEY surface modelling with VSIM - Jonathan SMITH (Tech-X UK Ltd)

12:20 MC Simulation of SEY for Noble metals - Martina Azzolini (ECT*-FBK-Universita' degli studi di Trento)

12:40 Low-secondary electron emission coatings for ESA’s Galileo - ISABEL MONTERO (ICMM-CSIC)

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Monday, 4 June 2018

09:00 Progress with 3D modelling of beam dynamics in presence of electron cloud - Jean-Luc Vay (Berkeley Lab)

09:30 Post-ecloud regime, challenges for multi-species simulations in beam dynamics - Lotta Mether (EPFL)

10:00 A global view on electron cloud instability simulations in the LHC and HL-LHC - Annalisa Romano (CERN)

10:30 --- Coffee break ---

**Simulations and diagnostics (II)** - MAKOTO TOBIYAMA (KEK Accelerator Laboratory) (until 13:00)

11:00 E-cloud challenges at SuperKEKB and future colliders - Kazuhito Ohmi (KEK)

11:30 Simulations of synchrotron-radiation-induced electron production in the CESR vacuum chamber wall - James Crittenden (Cornell University)

12:00 Secondary Emission Models in e-cloud buildup simulations: from the lab to the code - Luca Sabato (CERN)

12:20 Preliminary results obtained with the LHC Vacuum Pilot Sector - Elena Buratin (CERN)

12:40 DAFNE&ecloud: observations and prospective Catia Milardi (LNF)

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Tuesday, 5 June 2018

09:00 Simulations and diagnostics (I) - James Crittenden (Cornell University) (until 10:30)

11:00 Secondary Emission Models in e-cloud buildup simulations: from the lab to the code - Luca Sabato (CERN)

11:30 Simulations of synchrotron-radiation-induced electron production in the CESR vacuum chamber wall - James Crittenden (Cornell University)

12:00 Secondary Emission Models in e-cloud buildup simulations: from the lab to the code - Luca Sabato (CERN)

12:40 DAFNE&ecloud: observations and prospective Catia Milardi (LNF)

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Wednesday, 6 June 2018

09:00 Simulations and diagnostics (I) - James Crittenden (Cornell University) (until 10:30)

11:00 Simulations and diagnostics (II) - MAKOTO TOBIYAMA (KEK Accelerator Laboratory) (until 13:00)

11:00 E-cloud challenges at SuperKEKB and future colliders - Kazuhito Ohmi (KEK)

11:30 Simulations of synchrotron-radiation-induced electron production in the CESR vacuum chamber wall - James Crittenden (Cornell University)

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12:40 DAFNE&ecloud: observations and prospective Catia Milardi (LNF)
<table>
<thead>
<tr>
<th>Time</th>
<th>Monday, 4 June 2018</th>
<th>Tuesday, 5 June 2018</th>
<th>Wednesday, 6 June 2018</th>
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<tbody>
<tr>
<td>13:00</td>
<td>Lunch break</td>
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<tr>
<td>13:00</td>
<td>ECE effects on vacuum and heat load (I) - Giovanni Rumolo (CERN)</td>
<td>Multipactoring and related effects - Vincent Baglin (CERN)</td>
<td>Mitigation (I) - kazuhito ohmi (KEK)</td>
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<tr>
<td>15:00</td>
<td>An overview on heat loads in the LHC - Giovanni Iadarola (CERN)</td>
<td>SEY properties in Plasma research, modelling and measurements - Igor Kaganovich (PPPL)</td>
<td>ECE and its cures in the SuperKEKB positron ring - Yusuke Suetsugu (High Energy Accelerator Research Organization (KEK))</td>
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<td>15:00</td>
<td>SEY properties in Plasma research, modelling and measurements - Igor Kaganovich (PPPL)</td>
<td>Recent advances on multipactor effect in satellites communications RF - Gimeno Martinez Benito (University of Valencia)</td>
<td>SEY lowering with a-C coating in SPS and LHC - Pedro Costa Pinto (CERN)</td>
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<td>15:30</td>
<td>Dynamic pressure related to electron cloud during Run2 machine operation in the LHC - Christina Yin Valigren (CERN)</td>
<td>SEY properties of dielectric materials, modelling and measurements - Mohamed Belhaj (ONERA)</td>
<td>Laser Ablated Surface Engineering (LASE) for e-cloud mitigation: from discovery to machine application - reza valizadeh (ASTeC, STFC)</td>
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<td>17:00</td>
<td>How does a cryogenic system cope with e-cloud induced heat load? what can we learn from heat load measurements (including evolution, transients, etc)? - Benjamin Bradu (CERN)</td>
<td>Experiments with stable confined electron columns - Katrin Isabel Thoma (Goethe Universität Frankfurt)</td>
<td>Low SEY LASE and NEG coated surfaces and their surface resistance, vacuum properties and particulate generation - Oleg Malyshev (STFC Daresbury Laboratory)</td>
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<td>17:00</td>
<td>Multipactoring in the RF structures - Nasrin Nasresfahani (CERN)</td>
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<td>Mitigation (II) - Oleg Malyshev (STFC Daresbury Laboratory)</td>
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<td>18:00</td>
<td>ECE Effects on Vacuum and heat load (II) - Maria Rosaria Masullo (NA) (until 19:30) ()</td>
<td>Electron and photon interaction with low temperature surfaces - Lotta Mether (EPFL)</td>
<td>SEY, pumping properties and surface resistance of new high electric conductivity NEG coating - adrian hannah (STFC ASTeC)</td>
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<td>18:00</td>
<td>Impedance issues in ECE research - Benoit Salvat (CERN)</td>
<td>SR interaction with cryosorbed layers - Rémi Dupuy (LERMA (Sorbonne Université, Obs. Paris))</td>
<td>In-situ coating and scrubbing of long narrow beam pipes for eliminating electron clouds and reducing vacuum wall RF resistivity - Ady Hershcovitch (BNL)</td>
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<td>18:30</td>
<td>Experimental challenge in linear and circular accelerators driven by impedance issues - Andrea Mostacci (Sapienza)</td>
<td>SEY and other material properties studies at cryogenic temperatures - Luisa Spallino (LNF)</td>
<td>Intrabunch feedback system development at Dafne - Alessandro Drago (LNF)</td>
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<td>18:50</td>
<td>SubTHz EM characterization of coated material - Vittorio Giorgio Vaccaro (NA)</td>
<td>Characterisation of technical surfaces at cryogenic temperature under electron bombardment - Bernard Henrist (CERN)</td>
<td>Outlook and conclusion - Andrea Ghigo (LNF)</td>
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<td>19:10</td>
<td>Instability caused by e-cloud in combined function magnets: the FERMILAB experience - Sergey Antipov (CERN)</td>
<td>Coldex: A tool to study cold surfaces in Accelerators - Vincent Baglin (CERN)</td>
<td>ECLUD18 Summary and Outlook - FRANK ZIMMERMANN (CERN)</td>
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<td>20:00</td>
<td>Dinner</td>
<td>Football match ECE Theory vs ECE Experiment ---</td>
<td>ECLUD18 Closing remarks - Roberto Cimino (LNF)</td>
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<td>20:00</td>
<td>--- Social dinner and dance ---</td>
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