Preliminary schedule

Day	Wed 02/10		Thu 03/10		Fri 04/10		Sat 05/10
	Living Room 1+2	Seminar room 2013/2014	Living Room 1+2	Seminar room 2013/2014	Living Room 1+2	Seminar room 2013/2014	Living Room 1+2
9:00			*T. Gorlov (ORNL): Photoionization of negative hydrogen ion beam	*S. Appel (GSI): Machine learning and advanced accelerator optimisation at GSI/FAIR	*E. Valetov (MSU): Beam dynamics for the Muon g-2 experiment	S. Alshammari (KACST): Ion optical calculations of high resolution analyzing magnet system for heavy molecular ions at KACST	*J.-L. Vay (LBNL): Overview of US SciDAC5 accelerator modeling project
9:10							
9:20						D. Paudel (CERN): Data-driven modeling of quenches in superconducting accelerator magnets	
9:30			*L. Ge (SLAC): Integrated simulation of cavity design and radiation transport codes (ACE3P + Geant4)	V. Isensee (TUDa): Physics-informed bayesian optimization for closed orbit correction in synchrotrons	*Y. Hao (MSU): A Julia package for auto-differentiation application accelerator modeling and tracking		*M. Berz (MSU): Nonlinear beam dynamics tools for field treatment, symplectic tracking and spin in COSY INFINITY
9:40						M. Liebsch (CERN): Integration of magnetic measurement data in magnetic field simulations by BEM-based discrepancy modeling	
9:50				O. Kazinova (TUDa): Beam loss minimization for SIS18 slow extraction			
10:00			S. Udongwo (Uni Rostock): CAV-SIM-2D: a simulation and analysis tool for 2D axisymmetric accelerator cavity geometries		L. Riik: Simulation of driven plasma modes in Penning-Malmberg traps	E. Paakkunainen (TUDa): Homogenization of HTS magnet coils using the foil conductor model	*A. Edelen (SLAC): Machine learning using Bayesian optimization
10:10				D. Dewitt (TUDa): Gradient based beam line optimization for laser-accelerated ions using surrogate models			
10:20					Group photo		
10:30			Coffee		Coffee		~~N. Cook (RadiaSoft): Integrating community codes for accelerator design and optimization~~
10:40							
10:50							Coffee
11:00	Registration & Welcome Coffee		*B. Cathey (ORNL): PyORBIT as an online model and virtual accelerator at SNS	*M. Wozniak (CERN): Simuation of quench protection systems of next generation superconduction magnets	*W.-Y. Chang (NSRRC): Computational challenges in the development of a THz FEL at National Synchrotron Radiation Research Center	*T. Egenolf (TUDa): Fast surrogate models for dielectric laser accelerator diagnostics	
11:10							
11:20							Closing
11:30			S. Appel (GSI): Data-driven model predictive control for automated optimization of injection into the SIS18 synchrotron	J.-M. Christmann (TUDa): Efficient nonlinear simulations of fast corrector magnets	E. Gjonaj (TUDa): Modeling of intrabeam scattering in electron injectors	M. Konrad (FAU): Gradient descend-based optimization of the acceleration field in sub-relativistic dielectric laser accelerators using the adjoint method	
11:40							
11:50			A. M. Guisao Betancur (University of Liverpool): Longitudinal profile reconstruction of ultrashort electron bunches with coherent transition radiation images and ~~machine learning~~	D. Moll (TUDa): Transient analysis of fast ramping normal-conducting muon-collider magnets	M. Bulgacheva (TUDa): Simulation study of nanostructured copper photocathodes	W. An (Beijing Normal University): Recent development on the quasi-static PIC code QuickPIC and QPAD	Lunch
12:00							
12:10			E. Musa (DESY): Tuning simulations for FCC-ee using Python Accelerator Toolbox	L. D'Angelo (TUDa): Modeling screening currents in a reduced magnetic vector potential formulation with higher-order magnetic moments	J. Christ (TUDa): A self-consistent model for wakefield and space charge calculations	D. Simeoni (INFN): A Lattice Boltzmann approach to plasma simulation in the context of wakefield acceleration	
12:20							
12:30							
12:40	Lunch		Lunch		Lunch		
12:50							
13:00							
13:10							
13:20							
13:30	Opening						
13:40							
13:50	*G. Iadarola (CERN): Xsuite: a multiplatform toolbox for optics design, fast tracking, collimation and collective effects						***Invited talks***
14:00			*K. Ruisard (ORNL): Benchmark of LINAC model and phase space measurements at the SNS Beam Test Facility	*F. Van der Veken (CERN): Introducing Xcoll: a streamlined approach to collimation and beam loss simulations using Xsuite			30 minutes including questions
14:10							
14:20	*I. Karpov (CERN): Longitudinal beam dynamics simulations		*S. Y. Teng (NCU): Numerical simulation of a laser plasma driven HGHG FEL	*L. Deniau (CERN): MAD-NG, a standalone multiplatform tool for non-linear optics design and optimisation and sucessor to MAD-X			**Contributed talks**
14:30							20 minutes including questions
14:40							
14:50	K. Makino (MSU): Rigorous bounds for the errors of high-order transfer maps		L. Thiele (Uni Rostock): Beam-cavity interactions in the rapid cycling synchrotron chain of the future muon collider	M. Signorelli (Cornell University): SciBmad: a full-featured ecosystem for modern, differentiable accelerator physics simulations			
15:00							
15:10	K. Paraschou (CERN): Weak-strong simulations of electron clouds effects from the inner triplets of the Large Hadron Collider			D. Sagan (Cornell University): SciBmad Collaboration Discussion			
15:20							
15:30	Coffee		Coffee		Excursion		**Color code = conference topic**
15:40							A-1
15:50							A-2
16:00	*J. Qiang (LBNL): Advances in modeling space-charge effects	*Y. Liu (LBNL): Green's function-based methods for modeling electromagnetic interaction between RF accelerator cavity and electron bunch	*C. Mitchell (LBNL): Tools for modeling beam dynamics in rings based on nonlinear integrable optics	*C. Huang (LANL): Simulation advances in coherent synchrotron radiation modeling			B-1
16:10							B-2
16:20							C-1
16:30	*M. Schenk (CERN): Automation and AI integration at the CERN injectors	F. Quetscher (TUDa): Schwarz domain decomposition with the modal transmission condition applied to an in-vacuum undulator at PETRA III, DESY	C. Xu (KIT): Cheetah - a high-speed differentiable beam dynamics simulation for machine learning applications	A. Alrashdi (KACST): Applications of gamma-rays at future intense positron sources			C-2
16:40							D-1
16:50		E. de la Fuenta Garcia (CERN): "wakis": an open-source 3D time-domain electromagnetic solver for beam-coupling impedance calculation	E. Valetov (MSU): New muon campus simulations for the muon g^-2 experiment at Fermilab	K. S. Alharbi (KACST): Investigating the appropriateness of a shorter period of a non-ideal helical undulator for the ILC-250 stage			D-2
17:00	~~N. Cook (RadiaSoft): Coupled simulations of collimator irradiation in fourth generation light sources~~						E-1
17:10		L. Kronhorst (TUDa): Calculating the transverse shunt impedance from eigenmode results	S. Sorge (GSI): Determination of uncontrolled beam loss and spill micro structures during slow extraction for the future FAIR synchrotron SIS100 with particle tracking	D. Sagan (Cornell University): Accelerator Physics Simulation Development Collaboration Discussion			E-2
17:20							F-1