Working Group 2 **Tuesday, Jul 29th**

1:30 – 3:00 PM	Joint Session with WG3		
(20 minutes)	J. Norem	Argonne National Laboratory	A Model of RF Breakdown
(20 minutes)	Zikri Yusof	Argonne National Laboratory	Vacuum Breakdown Modeling in RF Fields
(20 minutes)	Peter Stoltz	Tech-X Corp	3D multipacting simulations in high gradient structures
(20 minutes)	John F. DeFord	Simulation Technology & Applied Research, Inc.	Progress in Dark Current and Multipacting Modeling Support in the Analyst Finite-Element Software Package
3:30 – 5:00 PM	Joint Session with WG1		
(20 minutes)	Daniel Gordon	Naval Research Laboratory	Electro-Optic Shock Generation in Laser Wakefield Accelerators
(20 minutes)	Joseph Ralph	UCLA	Self-Guiding of Ultrashort Relativistically Intense Laser Pulses to the Limit of Nonlinear Pump Depletion
(10 minutes)	Karoly Nemeth	Accelerator Systems Division, Argonne National Laboratory	Laser-driven coherent betatron oscillation in a laser-wakefield cavity
(10 minutes)	G.J.H. Brussaard	Eindhoven University of Technology	Timing and Energy Stability in a Laser Wakefield Accelerator with External Injection.

Working Group 2 **Wednesday, Jul 30th**

10:30AM – Noon	Beam-Cavity/Beam-Plasma Interactions		
(20 minutes)	Arno Candel	Stanford Linear Accelerator Center	Parallel Higher-Order Finite Element 3D Particle-In-Cell Code for Realistic Simulations of Beam-Cavity
(20 minutes)	Luis O. Silva	Instituto Superior Tecnico, Lisbon, Portugal	Short-period plasma undulators for free-electron lasers
(20 minutes)	John Cary	Tech-X Corp. and University of Colorado	Frequency Extraction from Crab Cavities using Time Domain Simulation
(30 minutes)		Free Discussion	
1:30 – 3:00 PM	Joint Session with WG5		
(20 minutes)	Chiping Chen	Massachusetts Institute of Technology	Adiabatic Thermal Beam Equilibrium in an Alternating-Gradient Focusing Field
(20 minutes)	Chengkun Huang	UCLA	Numerical study of a 0.5TeV PWFA afterburner
(20 minutes)	Efthymios Kallos	University of Southern California	Simulations of a high-transformer-ratio plasma wakefield accelerator using multiple electron bunches
(20 minutes)	xiaodong wang	USC	Positron Injection and Acceleration on the Wake Driven by an Electron Beam in a Plasma

Working Group 2 **Thursday, Jul 31st**

10:30AM – Noon	Simulations in Boosted Frames		
(20 minutes)	J.-L. Vay	Lawrence Berkeley National Laboratory	Noninvariance of Space- and Time-Scale Ranges under a Lorentz Transformation and the Implications for the
(20 minutes)	Samuel Martins	GoLP/IPFN - Instituto Superior Tecnico - Portugal	Full-PIC 3D simulations of LWFA in boosted frames for long propagation distances
(20 minutes)	David Bruhwiler	Tech-X Corporation	Simulating 10 GeV Laser Wakefield Acceleration (LWFA) in an Optimal Lorentz Frame
(20 minutes)	William M. Fawley	LBNL	Use of the Lorentz-Boosted Frame Transformation to Simulate Free-Electron Laser Amplifier Physics
1:30 – 3:00 PM	Exotic Architectures		
(20 minutes)	Brian J. Albright	Los Alamos National Laboratory	High Performance Modeling of Advanced Accelerators - Design Considerations for Hybrid Supercomputers and Roadrunner Lessons Learned
(20 minutes)	Peter Stoltz	Tech-X	GPULib: GPU programming for the rest of us
(20 minutes)	Luis O. Silva	Instituto Superior Tecnico, Lisbon, Portugal	Hardware acceleration of PIC codes: tapping into the power of state of the art GPUs
3:30 – 5:00 PM	Electron Beams		
(20 minutes)	J.-L. Vay	Lawrence Berkeley National Laboratory, CA, USA	Update on the application of the Adaptive Mesh Refinement technique to Particle-In-Cell simulations of plasmas and beams
(20 minutes)	Kevin Paul	Tech-X Corporation, Boulder, CO	Half-Cell RF Gun Simulations with the Electromagnetic Particle-in-Cell Code VORPAL
(20 minutes)	Mark Hess	Indiana University Cyclotron Facility	Electromagnetic Space-Charge Simulations of Photoinjectors with IRPSS
(20 minutes)	Rami A. Kishek	IREAP, University of Maryland, College Park, MD	Considerations for Modeling Beams with Space Charge

Working Group 2 — Friday, August 1st

10:30AM – Noon	Joint Session with WG1		
(20 minutes)	Xavier Davoine	CEA/DIF	Simulation of quasi-monoenergetic electron beams produced by colliding pulse wakefield acceleration
(20 minutes)	Samuel Martins	GoLP/IPFN - Instituto Superior Tecnico - Portugal	Numerical simulations of LWFA for the next generation laser systems
(10 minutes)	Estelle Cormier-Michel	Lawrence Berkeley National Laboratory	Scaled simulations of a 10 GeV accelerator
(10 minutes)	David A Burton	Lancaster University and the Cockcroft Institute	Geometry of thermal plasma oscillations
1:30 – 3:00 PM	Simulation of LWFA's II		
(20 minutes)	Benjamin Cowan	Tech-X Corporation	Laser wakefield simulation using a speed-of-light frame envelope model
(20 minutes)	S. Austin Yi	Department of Physics and Institute for Fusion Studies, University of Texas at Austin	Numerical modeling of nonlinear dynamics of multi-color laser beams in plasmas
(20 minutes)	Kevin Paul	Tech-X Corporation, Boulder, CO	Benchmarking the codes VORPAL, OSIRIS, and QuickPIC with Laser Wakefield Acceleration Simulations