

Tech-X Corporation Agenda for the 10th International Computational Accelerator Physics Conference on August 31 -September 4, 2009 in San Francisco

Location

Tech-X Corporation invites you to visit us at our booth at the 10th International Computational Accelerator Physics Conference, August 31 - September 4, 2009, in San Francisco.

Announcement

We are proud to present the latest release of our electromagnetic plasma simulation software, VORPAL (<http://vorpal.txcorp.com>). VORPAL 4.0 provides for the first time parallel and multi-core capability to the Windows platform (as with previous versions, VORPAL 4.0 also runs in parallel on the Linux and Macintosh platforms). Let VORPAL 4.0 help you take full advantage of your multi-core desktop computer. Other new capabilities include:

- cylindrical coordinates for electromagnetic simulation
- automated eigenfrequency and eigenmode extraction from time-domain simulation
- new secondary electron models that allow simulations of complex metallic and dielectric boundaries of arbitrary shape without stairsteps
- improved post-processing, including automated import into the VisIt software for advanced visualization
- improved documentation, including a detailed, 180-page reference manual, a 160-page users guide, and a 157-page examples guide

(Tech-X conference agenda on following page)

Presentation Schedule

Personnel from Tech-X will be presenting:

Monday, August 31, 1:30PM - 3:35PM, Dan Abell, *"Computation of high order maps for rf cavities from surface data"*

Tuesday, September 1, 8:10AM - 9:50AM, Travis Austin, *"Validation of parallel FDTD simulations using measured frequencies of the A15 accelerator cavity"*

Tuesday, September 1, 3:45PM - 5:50PM, David Smithe, *"Charge-conserving ADI for FDTD-PIC Maxwell-Lorentz simulations"*

Wednesday, September 2, 10:00AM - 11:40AM, Peter Messmer, *"Hardware acceleration for computational electromagnetics"*

Wednesday, September 2, 10:00AM - 11:40AM, Svetlana Shasharina, *"VizSchema - A standard approach for visualization of computational accelerator physics data"*

Wednesday, September 2, 1:30PM - 3:10PM, Nanbor Wang, *"Next-generation communication middleware for high-level accelerator applications"*

Wednesday, September 2, 3:30PM - 5:10PM, Dimitre Dimitrov, *"Simulations of diamond amplifiers for photocathodes"*

Thursday, September 2, 3:30PM - 5:35PM, Chet Nieter, *"Multipacting simulations of 56 MHz cavities for the RHIC upgrade"*

Posters

Personnel from Tech-X will be presenting the following posters as well:

Thursday, September 3, 6:30PM - 9:30PM, Ilya Pogorelov, Dan Abell, and Peter Stoltz, *"Application of a 3D Map-Based Approach to Modeling Beam Transport in Crab Cavities"*