



**Boulder, CO – February 19, 2010** – Tech-X Corporation invites you to visit us at our booth at the [SIAM Conference on Parallel Processing for Scientific Computing](#) (PP10), to take place **February 24 – 26, 2010** in **Seattle, WA** at the Grand Hyatt Seattle.

We will also be demonstrating [GPULib](#), our library of mathematical kernels for GPU computing and [VORPAL](#), our highly-configurable multiphysics simulation application for modeling the interaction of matter with electromagnetic fields.

## Tech-X Presentation Schedule

### Wednesday, February 24

#### **CP3: System Software, Environments, and Tools**

**1:20 PM - 3:20 PM / Room: Stevens - 7th Floor**

**1:40-1:55 Towards Standardizing Parallel Visualization of Scientific Data**

*Seth Veitzer*, Tech-X Corporation; *Svetlana Shasharina*, Tech-X Corporation; *John Cary*, Tech-X Corporation; *Marc Durant* and *Scott Kruger*, Tech-X Corporation

### Thursday, February 25

#### **CP7: Simulation**

**9:50 AM - 11:50 AM / Room: Washington - 7th Floor**

**9:50-10:05 Plasma Simulation Code Optimization on Petascale Systems**

*Peter Messmer* and *Paul Mullaney*, Tech-X Corporation; *Keegan Amyx* and *Ben Cowan*, Tech-X Corporation; *Boyana Norris*, Argonne National Laboratory

#### **PP1: Poster Session**

**8:30 PM - 10:30 PM / Room: Princessa**

#### **Automatic Sparse Preconditioners for the Spectral Element Method**

*Travis M. Austin*, Tech-X Corporation; *Thomas Manteuffel*, *Marian Brezina*, and *John Ruge*, University of Colorado at Boulder

#### **Fully Implicit, Jacobian-Free, Newton-Krylov Methods in Production Level MHD Fusion Codes**

*Ben Jamroz*, Tech-X Corporation; *Travis Austin* and *Scott Kruger*, Tech-X Corporation

#### **GPU Acceleration of Parallel Out-Of-Core Dense Linear Solvers**

*Peter Messmer*, Tech-X Corporation; *Matthew Koch*, Tech-X Corporation; *Paul Mullaney*, Tech-X Corporation



[www.txcorp.com](http://www.txcorp.com)

Press Announcement

Contact: [sales@txcorp.com](mailto:sales@txcorp.com)

## Friday, February 26

MS50: Software Design Patterns for Addressing Complexity in Large Scale Multiphysics Applications

9:50 AM - 11:50 AM / Room: Portland A/B

**10:50-11:15 Addressing Software Complexity in a Multiphysics Parallel Application: Coupled Core-Edge-Wall Fusion Simulations**

*John Cary*, Tech-X Corporation; *Lois Curfman McInnes*, Argonne National Laboratory; *Tom Epperly*, Lawrence Livermore National Laboratory; *Ammar Hakim*, Scott Kruger, *Mahmood Miah*, *Alex Pletzer*, and *Sveta Shasharina*, Tech-X Corporation