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Tech-X Corporation Releases VORPAL v5.0
New features allow VORPAL to better solve problems

Boulder, CO – September 01, 2011 - Tech-X Corporation of Boulder, Colorado, announced the release of VORPAL v5.0. VORPAL allows researchers to solve the most challenging problems in electromagnetics and electrostatics, in either the presence or absence of matter, using sophisticated solvers as well as both fluid and particle representations of matter. New capabilities will allow researchers to apply VORPAL in new application areas.

VORPAL Expands its Problem Domain with New Capabilities

VORPAL offers a unique combination of physical models to cover the entire range of plasma simulation problems. Laser wakefield accelerators, plasma thrusters, high-power microwave guides, and plasma processing chambers are only a few of the many applications benefiting from the powerful, parallel algorithms incorporated into the VORPAL framework. New capabilities include an improved visualization environment, the ability to perform simulations in cylindrical coordinates, a refactored framework for particles collisions, execution of electromagnetic (EM) simulations on GPUs, improved restart performance, and redesigned more comprehensive documentation.

Expertise to Solve Complex Problems

VORPAL has been optimized for maximum performance on various computing platforms, ranging from desktop machines to supercomputers. Its powerful domain decomposition algorithms, checkpoint capabilities, and the use of standard data formats

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enable VORPAL to efficiently execute complex plasma simulations on thousands of processors.

For more information on VORPAL, please visit <http://vorpal.txcorp.com>.

About Tech-X Corporation

Tech-X Corporation is committed to technical excellence and innovation. Our technical staff addresses specific research questions and delivers quantifiable results, culminating in specialized skills, advanced technologies, and commercial products that enable large-scale computing solutions and offer a greater understanding of physical processes. Among our core competencies is the simulation of processes, devices, and physical systems related to plasma physics, fusion, and accelerator technologies, performed on computer systems ranging from desktops to Grand Challenge class high-performance computers. By creating software for simulations and the infrastructure to support our research development, we are able to increase our understanding of complex physical phenomena. For more information, visit <http://www.txcorp.com>.

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