Abstract Submitted for the DPP09 Meeting of The American Physical Society

FACETS – Infrastructure for Integrated Fusion Modeling¹ SVET-LANA SHASHARINA, JOHN CARY, JOHAN CARLSSON, AMMAR HAKIM, SCOTT KRUGER, MAHMOOD MIAH, ALEXANDER PLETZER, SRINATH VADLAMANI, DAVID WADE-STEIN, Tech-X Corporation, SATISH BALAY, LOIS MCINNES, HONG ZHANG, Argonne National Laboratory, JEFF CANDY, General Atomics, MARK FAHEY, Oak Ridge National Laboratory, RON COHEN, TOM EPPERLY, TOM ROGNLIEN, Lawrence Livermore National Laboratory, DON ESTEP, Colorado State University, ALEXEI PANKIN, Lehigh University, ALLEN MALONY, ALAN MORRIS, SAMEER SHENDE, Paratools, KESHAVA-MURTHY INDIRESHKUMAR, DOUGLAS MCCUNE, Princeton Plasma Physics Laboratory, ALEXANDER PIGAROV, University of California San Diego — It is desirable that an infrastructure for integrated fusion modeling has support for: legacy and new components used interchangeably; consistent management of components lifecycle; allocating parallel resources consistent with the nature of participating components and the problem scope; components written in multiple programming languages; composition of sequentially and concurrently executing components respecting dependencies; tight and loose coupling of components; testing and validation of separate and integrated components; and use of multiple platforms from desktops to LCFs. In this poster we will describe the status of the FACETS with respect to these features.

¹FACETS is funded by the DOE SciDAC program.

Svetlana Shasharina Tech-X Corporation

Date submitted: 16 Jul 2009 Electronic form version 1.4