Results from the PSI-Center Interfacing Group

B.A. NELSON, C.C. KIM, R.D. MILROY, T.R. JARBOE, PSI-Center - Univ of Washington, Univ of Wisconsin-Madison, and Utah State Univ AND ICC COLLABORATORS — The Interfacing Group of the Plasma Science and Innovation Center (PSI-Center - http://www.psicenter.org) facilitates simulations of collaborating Innovative Confinement Concept (ICC) experiments. Present collaborating experiments include the Bellan Plasma Group (Caltech), FRX-L (Los Alamos National Laboratory), HITSI (Univ of Wash - UW), LDX (M.I.T.), MST, Pegasus (Univ of Wisc-Madison), PHD (UW), SSPX (Lawrence Livermore National Laboratory), SSX (Swarthmore College), TCS (UW), and ZaP (UW). LDX simulations study stability of marginally-stable equilibria as additional heating increases pressure gradients. Simulations of translating FRCs, such as PHD, have recently started, using equilibria from a mimetic-operator Grad-Shafranov solver. Output files from NIMROD and its nimplot postprocessor suite are interfaced to the powerful 3-D visualization program, VisIt (http://www.llnl.gov/visit). Results from these simulations, as well as an overview of the Interfacing Group status will be presented.