Abstract Submitted for the DPP05 Meeting of The American Physical Society

Overview of The Plasma Science and Innovation Center (PSI-Center) T.R. JARBOE, C.C. KIM, G. MARKLIN, A.I.D. MACNAB, R.D. MIL-ROY, B.A. NELSON, U. SHUMLAK, S. VADLAMANI, S. WOODRUFF, University of Washington, R.A. BAYLISS, C.R. SOVINEC, University of Wisconsin-Madison, E. HELD, J-Y. JI, Utah State University — The Plasma Science and Innovation Center (PSI-Center) has recently formed. A principal goal is the refinement of overlapping computational tools with sufficient physics, boundary conditions, and geometry to be calibrated with experiments to achieve significantly improved predictive capabilities. The Center is for ICC experiments, especially EC experiments. The PSI-Center will initially concentrate on five focus areas: 1) two fluid / Hall physics, 2) kinetic and FLR effects, 3) reconnection and relaxation physics, 4) transport, atomic physics and radiation, and 5) boundary conditions and geometry. The entire ICC community is invited to participate in this center while nine experimental programs will provide the initial database. These nine experiments are:1) Caltech reconnection experiments, 2) FRX-L, 3) HIT-SI, 4) MBX, 5) PHD, 6) SSPX, 7) SSX, 8) TCS, and 9) ZAP. (Work supported by DOE)

Brian Nelson University of Washington

Date submitted: 22 Jul 2005 Electronic form version 1.4