Abstract Submitted for the DPP17 Meeting of The American Physical Society

The Particle-in-Cell and Kinetic Simulation Software Center¹ W. B. MORI, V. K. DECYK, A. TABLEMAN, UCLA, R. A. FONSECA, IST, F. S. TSUNG, Q. HU, B. J. WINJUM, W. AN, T. N. DALICHAOUCH, A. DAVIDSON, L. HILDEBRAND, A. JOGLEKAR, J. MAY, K. MILLER, M. TOUATI, X. L. XU, UCLA — The UCLA Particle-in-Cell and Kinetic Simulation Software Center (PICKSC) aims to support an international community of PIC and plasma kinetic software developers, users, and educators; to increase the use of this software for accelerating the rate of scientific discovery; and to be a repository of knowledge and history for PIC. We discuss progress towards making available and documenting illustrative open-source software programs and distinct production programs; developing and comparing different PIC algorithms; coordinating the development of resources for the educational use of kinetic software; and the outcomes of our first sponsored OSIRIS users workshop. We also welcome input and discussion from anyone interested in using or developing kinetic software, in obtaining access to our codes, in collaborating, in sharing their own software, or in commenting on how PICKSC can better serve the DPP community.

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