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Building an infrastructure at PICKSC for the educational use of kinetic software tools¹ W. B. MORI, V. K. DECYK, A. TABLEMAN, UCLA, R. A. FONSECA, IST, F. S. TSUNG, Q. HU, B. J. WINJUM, UCLA, L. D. AMORIM, IST, W. AN, T. N. DALICHAOUCH, A. DAVIDSON, A. JOGLEKAR, F. LI, J. MAY, M. TOUATI, X. L. XU, P. YU, UCLA — One aim of the Particle-In-Cell and Kinetic Simulation Center (PICKSC) at UCLA is to coordinate a community development of educational software for undergraduate and graduate courses in plasma physics and computer science. The rich array of physical behaviors exhibited by plasmas can be difficult to grasp by students. If they are given the ability to quickly and easily explore plasma physics through kinetic simulations, and to make illustrative visualizations of plasma waves, particle motion in electromagnetic fields, instabilities, or other phenomena, then they can be equipped with first-hand experiences that inform and contextualize conventional texts and lectures. We are developing an infrastructure for any interested persons to take our kinetic codes, run them without any prerequisite knowledge, and explore desired scenarios. Furthermore, we are actively interested in any ideas or input from other plasma physicists. This poster aims to illustrate what we have developed and gather a community of interested users and developers.

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