

Abstract Submitted
for the DPP14 Meeting of
The American Physical Society

Particle In Cell Codes on Highly Parallel Architectures ADAM
TABLEMAN, UCLA Department of Physics — We describe strategies and exam-
ples of Particle-In-Cell Codes running on Nvidia GPU and Intel Phi architectures.
This includes basic implementations in skeletons codes and full-scale development
versions (encompassing 1D, 2D, and 3D codes) in Osiris. Both the similarities and
differences between Intel's and Nvidia's hardware will be examined. Work supported
by grants NSF ACI 1339893, DOE DE SC 000849, DOE DE SC 0008316, DOE DE
NA 0001833, and DOE DE FC02 04ER 54780.

Adam Tableman
UCLA Department of Physics

Date submitted: 11 Jul 2014

Electronic form version 1.4