

PSI2-SciDAC — Code Development and Recent Progress of the hPIC Particle-in-Cell for Plasma-Material Interactions



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 1. "Housekeeping" [UIUC] Code Cleanup and Development Cleanup structures and older functions using standards Improve APIs and usability of the hpic functions Repo maintenance, Docker Boltzmann electrons Expand BCs capabilities 	6
2. Wesh & domain nandling [UIUC, RPI]	
 Abstract functions for domain creation 1D nonuniform mesh 2D nonuniform mesh (regular) 2D nonuniform mesh (unstructured) PUMI-PIC meshing capability (RPI) 	8
3. I/O [UIUC, ORNL/Klasky]	
 Complete porting to ADIOS-2 Expand plotting and Viz routines Python IEAD printout from ADIOS-2 Implement Checkpoint & Restart Advanced Viz: Particle Data, Field Data, Animations 	9

https://collab.cels.anl.gov/display/PSIscidac2/Plasma+Surface+Interactions+2





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