Abstract Submitted for the DPP20 Meeting of The American Physical Society

PlasmaPy: Building an open source Python package for plasma science¹ D. STANCZAK, University of Warsaw, E. T. EVERSON, UCLA, N. A. MURPHY, SAO, J. P. BECKERS, ASML, K. BRYANT, U. Michigan, S. FORDIN, U. Delaware, P. HEUER, UCLA, F. KHAN, Bryn Mawr College, P. M. KO-ZLOWSKI, S. J. LANGENDORF, LANL, A. J. LEONARD, Aperio Software, R. MALHOTRA, Chandigarh U., B. MARUCA, U. Delaware, S. J. MUMFORD, U. Sheffield, T. N. PARASHAR, U. Wellington, D. SCHAFFNER, Bryn Mawr College, D. STANSBY, UCL, F. TAMBOLI, Bryn Mawr College, R. QUDSI, U. Delaware, T. VARNISH, UCL, S. VINCENA, UCLA, PLASMAPY COLLABORATION — The PlasmaPy Project is an ambitious effort centered around the open source Python package PlasmaPy. The PlasmaPy package is a community-driven and communitydeveloped package that provides common functionality required for plasma physics research and education. PlasmaPy prioritizes code readability, consistency, and maintainability while using best practices for scientific computing such as version control, continuous integration testing, and code review. PlasmaPy has a code of conduct and is available under a BSD 3-clause license with explicit protections against software patents. We will describe current capabilities of PlasmaPy, as well as our development roadmap. We will discuss how members of the plasma physics community can become contributors to this project.

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