

Abstract Submitted
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The PlasmaPy Project: Toward an Open Source Software Ecosystem for Plasma Physics¹ NICHOLAS A. MURPHY, Center for Astrophysics — Harvard Smithsonian, DOMINIK STAŃCZAK, University of Warsaw, PAWEŁ M. KOZŁOWSKI, LANL, ANDREW J. LEONARD, Aperio Software, RITIEK MALHOTRA, Chandigarh University, SAMUEL LANGENDORF, LANL, JASPER BECKERS, ASML, ERIK EVERSON, UCLA, TULASI N. PARASHAR, University of Delaware, DAVID STANSBY, Imperial College London, STUART MUMFORD, University of Sheffield, DAVID SCHAFFNER, Bryn Mawr College, PLASMAPY COLLABORATION — PlasmaPy is a community-developed open source core Python package for plasma physics in the early stages of development. This package is being developed to provide the core functionality that is needed to support a fully open source Python ecosystem for plasma physics. 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 the capabilities in PlasmaPy's version 0.2.0 release and PlasmaPy's development roadmap. We will discuss how members of the plasma physics community can become contributors to this project.

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