



Contribution ID: 442 Contribution code: WEP029

Type: Poster Presentation

## Developments in Lume-ACE3P Including Optimization for S3P

*Wednesday 13 August 2025 16:00 (2 hours)*

We present latest developments to Lume-ACE3P. Lume-ACE3P is a Python wrapper streamlining workflow for ACE3P, a suite of finite element solvers for electromagnetic fields in complex geometries. We have expanded Lume-ACE3P to allow users to perform parameter sweeps over all input parameters, including mesh file, geometry properties like type of material and material conductivity, and finite element solver properties like order. Further, we have configured Xopt to work with Lume-ACE3P for user-friendly optimization of the S3P module. We discuss our updated Lume-ACE3P workflow and results from S3P optimization runs.

### Please consider my poster for contributed oral presentation

No

### Would you like to submit this poster in student poster session on Sunday (August 10th)

Yes

### Footnotes

### Funding Agency

Work supported by US Department of Energy under contract AC02-76SF00515, as well as the Department of Energy Science Undergraduate Laboratory Internships Program.

### I have read and accept the Privacy Policy Statement

Yes

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**Session Classification:** WEP: Wednesday Poster Session

**Track Classification:** MC3 - Novel Particle Sources, Acceleration Techniques, and their Applications