

The **New Mexico Consortium (NMC)** is seeking a highly motivated **Postdoctoral Researcher** in **Computational Plasma Physics** to join an active research team working on a **DOE-funded project** focused on nonlinear wave dynamics in magnetized plasmas. The successful candidate will conduct advanced numerical simulations of **Alfvén wave parametric instabilities**, with applications to both **laboratory and space plasmas**.

Responsibilities

- Develop, run, and analyze particle-in-cell (PIC) simulations using the open-source C++ code **SMILEI** (<https://smileipic.github.io/Smilei/>)
- Publish research results in peer-reviewed journals
- Present findings at scientific conferences
- (Optional) Conduct laboratory experiments at the Large Plasma Device (LAPD) at UCLA, a premier plasma science research facility

Required Qualifications

- Ph.D. in plasma physics or a closely related field
- Experience running **Particle-In-Cell plasma simulations** and analysis
- Proficiency in C++ and Python programming
- Experience with high-performance computing environments
- Demonstrated record of publication in peer-reviewed journals
- Strong written and oral communication skills

Preferred Qualifications

- Expertise in nonlinear Alfvén waves and parametric instabilities
- Experience developing or extending C++ plasma simulation codes

Position Details

- Initial appointment of **one year**, with the possibility of extension based on performance and funding
- **Competitive salary**, commensurate with experience
- Comprehensive benefits package, including:
 - Health, dental, life, and disability insurance
 - Supplemental insurance options
 - Flexible spending account
 - Retirement plan
- Expected start date: **as soon as possible**
- Applications received **before April 30, 2026** will receive full consideration
- Position is based in **Los Alamos, New Mexico**; **fully remote arrangements may be considered**

Interested applicants are encouraged to contact
Dr. Feiyu Li (fyli@newmexicoconsortium.org) or

Dr. Sean Fu (sfu@newmexicoconsortium.org)
with questions regarding the position.

Please apply via the online application system (<https://formstack.io/F4BC2>) or by mail to:

New Mexico Consortium
4200 W. Jemez Road, #301
Los Alamos, NM 87544

Application materials should include:

- Curriculum vitae (CV)
- Cover letter
- Contact information for three referees (including names, affiliations, and email addresses).

The **New Mexico Consortium** is an independent nonprofit **Equal Opportunity Employer** (M/F/Vet/Dis) and an **E-Verify employer**.