Postdoctoral Research Position at the Center for High Energy Density Laboratory Astrophysics Research

The Center for High Energy Density Laboratory Astrophysics Research (CHEDAR), led by Professor Carolyn Kuranz, invites applications for a postdoctoral research position. This role offers a unique opportunity in cutting-edge research in high-energy-density physics and laboratory astrophysics. Joining CHEDAR means being part of a community dedicated to excellence, integrity, mutual respect, and inclusivity.

Research Focus:
The candidate will work on experimental projects related to plasma phenomena under extreme conditions, similar to astrophysical environments and inertial confinement fusion experiments. Key areas include hydrodynamic instabilities, radiation hydrodynamics and radiation transport, and magnetized HED flows.

Responsibilities:
- Design and conduct experiments at facilities such as NIF, Omega, and Z.
- Collaborate with interdisciplinary teams and other institutions.
- Develop theoretical models and computational simulations.
- Publish in peer-reviewed journals and present at conferences.
- Mentor graduate and undergraduate students.

Qualifications:
- PhD in Physics, Astrophysics, Plasma Physics, Engineering or a related field.
- Strong experimental background in high-energy-density physics.
- Experience with high-energy lasers or pulsed power devices.
- Familiarity with computational modeling and data analysis.
- Excellent communication skills and ability to work in teams.

The salary and benefits are competitive, and the successful applicant will have opportunities to develop new research ideas, participate in proposal development, lead collaborations with other research groups, and mentor graduate and undergraduate students. Applicants should send, as a single file pdf file, a cover letter (including date applicant is available), CV, reprints of representative publications and contact information for 3 references to Professor Carolyn Kuranz at ckuranz@umich.edu. Reviews will begin immediately and continue until the position is filled.