

Congratulations to Jessica Pilgram, recent awardee of an NSF GRFP.

Jessica earned her bachelors of science in physics with minors in mathematics and astronomy at California Polytechnic State University, San Luis Obispo. While attending Cal Poly, she conducted research in biophysics and hydrodynamic quantum analogs, as well as participated in summer research programs at UCLA where she conducted plasma physics research and at MIT continuing research in hydrodynamic quantum analogs.



Currently, Jessica is a graduate student researcher in the High Energy Density Physics group under Dr. Christoph Niemann where she conducts experimental plasma physics research focusing on astrophysical systems and phenomena. Her specific research focuses on studying the mechanisms behind and transport of spontaneously generated magnetic fields via the Biermann Battery effect. Through this research, she delves deep into the mechanisms of the spontaneous generation of magnetic fields to further understanding of the phenomena in many laser produced plasma experiments as well as give insight into the source of the magnetic seed fields of the universe. Alongside plasma research Jessica is also a mentor for multiple undergraduate women in physics, participates in science outreach events, takes dance classes, rock climbs, plays guitar and is a member of a DnD group.