

Mark Chilenski

“Mark”



Graduate Institution: Massachusetts Institute of Technology

Location: Cambridge, MA

Graduate Discipline: Nuclear Science and Engineering

Hometown: Renton, WA

Research Interests:

Mark Chilenski is interested in all aspects of experimental plasma physics, especially diagnostics and innovative confinement concepts. Mr. Chilenski will be doing his graduate work at MIT on the Levitated Dipole Experiment (LDX), a unique plasma confinement device that uses an inductively charged, magnetically levitated superconducting magnet in the middle of the plasma to provide a poloidal magnetic dipole field. This configuration is similar to a planetary magnetosphere, and enables laboratory observations of effects such as the turbulence-driven inward pinch. Mr. Chilenski spent the last four years working on the Helicity-Injected Torus (HIT-SI) experiment at the University of Washington, building and maintaining various optical and magnetic diagnostics. The HIT-SI device forms spheromak plasmas using steady inductive helicity injection (SIHI) current drive.

About me:

Mr. Chilenski graduated summa cum laude from the University of Washington in June 2010 with his bachelor of science in aeronautical and astronautical engineering. He was a research assistant for the HIT-SI experiment all four years at UW, and also did a summer internship with the Jet Propulsion Laboratory (JPL) working on imaging spectroscopy. He is a student member of the American Physical Society (APS), and has presented posters at the APS Division of Plasma Physics (APS-DPP) conference twice. Mr. Chilenski also has broad interests outside of the sciences and engineering, including playing all kinds of percussion instruments, medieval calligraphy and building scale models.



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