











Prof. Stephen Teitel

















Dr. Aaron Hansen received his PhD. in Plasma Physics from the University of Rochester's Department of Physics and Astronomy in 2021. He started his physics journey at the University of Minnesota Twin Cities where he earned a Bachelor of Science in Physics. He joined the Plasma & Ultrafast Physics Group at the Laboratory for Laser Energetics after receiving the Frank J. Horton Fellowship in 2017. Dr. Hansen published four first authored manuscripts, including a Physical Review Letter titled, "Cross-Beam Energy Transfer Saturation by Ion Heating," He co-authored five manuscripts, including a Nature Physics and Physical Review Letter. His work was summarized in an invited talk at the 2021 European Physical Societies Conference on Plasma Physics. His thesis work was performed under the direction of Prof. Dustin Froula.

Dr. Hansen developed a Laser-Plasma Instability Platform [Hansen et al. Rev. Sci. Instrum. 89, 10C103 (2018)] that was used to demonstrate the effects of non-Maxwellian electron distribution functions on laser absorption [Milder et al. Phys. Rev. Lett. 124, 025001 (2020)] and on cross-beam energy transfer [Turnbull et al. Nature Physics 16, 181 (2020)], and the saturation of cross-beam energy transfer by ion heating [Hansen et al. Phys. Rev. Lett. 126, 075002 (2021)]. His work will help set the foundation for laser-plasma instability physics in laser-driven high-energy density physics studies.













Thesis Defense

Laboratory for **Laser Energetics**

University of Rochester

Rochester, New York USA



Joe Katz, Zach Barfield, Linda Hansen, Phil Franke, David Turnbull, Kathleen Weichman, Tanner Simpson, Kyle McMillen, Linh Nguyen, Matthew VanDusen-Gross, Dustin Froula, Aaron Hansen, Avi Milder, Dillon Ramsey, Mary Hansen, Lindsey Hansen, Michael Hansen, Kendra Hansen