Stanford

Griffin Glenn

Ph.D. Student in Applied Physics, admitted Autumn 2019

Curriculum Vitae available Online

Bio

BIO

I am a PhD student in the Stanford Department of Applied Physics. My research, conducted in the SLAC National Accelerator Laboratory High Energy Density Science Division, focuses on developing sources of laser-driven ion and neutron beams using cryogenic liquid jet targets developed by our group.

HONORS AND AWARDS

- DOE NNSA Stewardship Science Graduate Fellowship, US DOE National Nuclear Security Administration (2020-2024)
- NSF Graduate Research Fellowship, National Science Foundation (2019-2020)
- Dean's Honored Graduate, College of Natural Sciences, The University of Texas at Austin (2019)
- Highest Academic Achievement Award, Department of Physics, The University of Texas at Austin (2019)
- Mitchell Award for Undergraduate Academic Excellence, University Co-op, The University of Texas at Austin (2019)
- Barry Goldwater Scholarship, Barry Goldwater Scholarship and Excellence in Education Foundation (2018)

EDUCATION AND CERTIFICATIONS

- BS, The University of Texas at Austin , Physics Honors (2019)
- BA, The University of Texas at Austin , Plan II Honors (2019)

Publications

PUBLICATIONS

- **Ambient-temperature liquid jet targets for high-repetition-rate HED discovery science** *PHYSICS OF PLASMAS*
  Treffert, F., Glenn, G. D., Chou, H. J., Crissman, C., Curry, C. B., DePonte, D. P., Fiuza, F., Hartley, N. J., Ofori-Okai, B., Roth, M., Glenzer, S. H., Gauthier, M.
  2022; 29 (12)

- **Improved large-energy-range magnetic electron-positron spectrometer for experiments with the Texas Petawatt Laser** *JOURNAL OF INSTRUMENTATION*
  Glenn, G. D., Tiwari, G., Dyer, G., Curry, C. B., Donovan, M. E., Gaul, E., Gauthier, M., Glenzer, S. H., Gordon, J., Hegelich, B. M., Martinez, M., McCary, E., Spinksa, et al
  2019; 14

- **Release dynamics of nanodiamonds created by laser-driven shock-compression of polyethylene terephthalate.** *Scientific reports*
  Heuser, B., Bergermann, A., Stevenson, M. G., Ranjan, D., He, Z., Lütgert, J., Schumacher, S., Bethkenhagen, M., Descamps, A., Galtier, E., Gleason, A. E., Khaghani, D., Glenn, et al
  2024; 14 (1): 12239

- **Automated control and optimization of laser-driven ion acceleration** *HIGH POWER LASER SCIENCE AND ENGINEERING*
  Loughran, B., Streeter, M. V., Ahmed, H., Astbury, S., Balcazar, M., Borghesi, M., Bourgeois, N., Curry, C. B., Dann, S. D., DiIorio, S., Dover, N. P., Dzelzainis, T., Ettlinger, et al

2023; 11

- **Versatile tape-drive target for high-repetition-rate laser-driven proton acceleration** *HIGH POWER LASER SCIENCE AND ENGINEERING*
  Xu, N., Streeter, M. V., Ettlinger, O. C., Ahmed, H., Astbury, S., Borghesi, M., Bourgeois, N., Curry, C. B., Dann, S. D., Dover, N. P., Dzelzainis, T., Istokskaia, V., Gauthier, et al
  2023; 11

- **High deuteron and neutron yields from the interaction of a petawatt laser with a cryogenic deuterium jet** *FRONTIERS IN PHYSICS*
  Jiao, X., Curry, C. B., Gauthier, M., Chou, H. J., Fiuza, F., Kim, J. B., Phan, D. D., McCary, E., Galtier, E. C., Dyer, G. M., Ofori-Okai, B. K., Labun, L., Labun, et al
  2023; 10

- **Diamond formation kinetics in shock-compressed C#H#O samples recorded by small-angle x-ray scattering and x-ray diffraction.** *Science advances*
  He, Z., Rodel, M., Lutgert, J., Bergermann, A., Bethkenhagen, M., Chekrygina, D., Cowan, T. E., Descamps, A., French, M., Galtier, E., Gleason, A. E., Glenn, G. D., Glenzer, et al
  2022; 8 (35): eabo0617

- **High-repetition-rate, multi-MeV deuteron acceleration from converging heavy water microjets at laser intensities of 10(21) W/cm(2)** *APPLIED PHYSICS LETTERS*
  Treffert, F., Curry, C. B., Chou, H. J., Crissman, C. J., DePonte, D. P., Fiuza, F., Glenn, G. D., Hollinger, R. C., Nedbailo, R., Park, J., Schoenwaelder, C., Song, H., Wang, et al
  2022; 121 (7)

- **Investigation of hard x-ray emissions from terawatt laser-irradiated foils at the Matter in Extreme Conditions instrument of the Linac Coherent Light Source** *JOURNAL OF INSTRUMENTATION*
  Fletcher, L. B., Curry, C. B., Gauthier, M., Glenn, G. D., Chen, Z., Cunningham, E., Descamps, A., Frost, M., Galtier, E. C., Heimann, P., Kim, J. B., Mo, M., Ofori-Okai, et al
  2022; 17 (4)

- **2D monochromatic x-ray imaging for beam monitoring of an x-ray free electron laser and a high-power femtosecond laser** *REVIEW OF SCIENTIFIC INSTRUMENTS*
  Sawada, H., Trzaska, J., Curry, C. B., Gauthier, M., Fletcher, L. B., Jiang, S., Lee, H. J., Galtier, E. C., Cunningham, E., Dyer, G., Daykin, T. S., Chen, L., Salinas, et al
  2021; 92 (1): 013510

- **Optimization of radiochromic film stacks to diagnose high-flux laser-accelerated proton beams** *REVIEW OF SCIENTIFIC INSTRUMENTS*
  Curry, C. B., Dunning, C. S., Gauthier, M., Chou, H. J., Fiuza, F., Glenn, G. D., Tsui, Y. Y., Bazalova-Carter, M., Glenzer, S. H.
  2020; 91 (9): 093303

- **Beam distortion effects upon focusing an ultrashort petawatt laser pulse to greater than 10(22) W/cm(2)** *OPTICS LETTERS*
  Tiwari, G., Gaul, E., Martinez, M., Dyer, G., Gordon, J., Spinks, M., Toncian, T., Bowers, B., Jiao, X., Kupfer, R., Lisi, L., McCary, E., Roycroft, et al
  2019; 44 (11): 2764–67