



## Claudia Camila Parisuana Barranca

- Ph.D. Student in Mechanical Engineering, admitted Winter 2021
- Ph.D. Minor, Physics

### Publications

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#### PUBLICATIONS

- **Characterization and automated optimization of laser-driven proton beams from converging liquid sheet jet targets** *PHYSICAL REVIEW RESEARCH*  
Glenn, G. D., Treffert, F., Ahmed, H., Astbury, S., Borghesi, M., Bourgeois, N., Curry, C. B., Dann, S. D., Diiorio, S., Dover, N. P., Dzelzainis, T., Ettliger, O., Gauthier, et al  
2026; 8 (1)
- **Shock propagation in aerogel and TPP foams for inertial fusion energy target design** *PHYSICS OF PLASMAS*  
Parisuana, C., Valdivia, M. P., Bouffetier, V., Kurzer-Ogul, K., Perez-Callejo, G., Bott-Suzuki, S., Casner, A., Christiansen, N. S., Czapla, N., Eder, D., Galtier, E., Glenzer, S. H., Goudal, et al  
2025; 32 (8)
- **Stable laser-acceleration of high-flux proton beams with plasma collimation.** *Nature communications*  
Streeter, M. J., Glenn, G. D., Dilorio, S., Treffert, F., Loughran, B., Ahmed, H., Astbury, S., Borghesi, M., Bourgeois, N., Curry, C. B., Dann, S. J., Dover, N. P., Dzelzainis, et al  
2025; 16 (1): 1004
- **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., Dilorio, S., Dover, N. P., Dzelzainis, T., Ettliger, 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., Ettliger, 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
- **New features of the ECH control system on DIII-D and impact of power modulation on collector loading**  
Torrezan, A. C., Ponce, D., Gorelov, Y., Cengher, M., Lohr, J., Parisuana, C.  
ELSEVIER SCIENCE SA.2019: 486-490
- **Update on the DIII-D ECH system: experiments, gyrotrons, advanced diagnostics, and controls**  
Lohr, J., Brambila, R., Cengher, M., Gorelov, Y., Grosnickle, W., Moeller, C., Ponce, D., Torrezan, A., Ives, L., Reed, M., Blank, M., Felch, K., Parisuana, et al  
edited by Litvak, A. G.  
E D P SCIENCES.2017