

Stanford



Chuan Cheng

Postdoctoral Scholar, Photon Science, SLAC

Bio

PROFESSIONAL EDUCATION

- Bachelor of Science, University of Science and Technology of China (2016)
- Doctor of Philosophy, S.U.N.Y. State University at Stony Brook (2023)
- PhD, State University of New York at Stony Brook, Physics (2023)
- Bachelor, University of Science and Technology of China, Physics (2016)

STANFORD ADVISORS

- Philip Bucksbaum, Postdoctoral Faculty Sponsor

LINKS

- Google Scholar - Chuan Cheng: <https://scholar.google.com/citations?user=qAydGfEAAAAJ&hl=en>
- Webpage - Chuan Cheng: <https://chuancheng1.wordpress.com/>
- Curriculum Vitae: https://chuancheng1.wordpress.com/wp-content/uploads/2024/04/cv_chengchuan.pdf

Publications

PUBLICATIONS

- **Filming enhanced ionization in an ultrafast triatomic slingshot.** *Communications chemistry*
Howard, A. J., Britton, M., Streeter, Z. L., Cheng, C., Forbes, R., Reynolds, J. L., Allum, F., McCracken, G. A., Gabalski, I., Lucchese, R. R., McCurdy, C. W., Weinacht, T., Bucksbaum, et al
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- **Multiparticle Cumulant Mapping for Coulomb Explosion Imaging.** *Physical review letters*
Cheng, C., Frasiniski, L. J., Mo#ol, G., Allum, F., Howard, A. J., Rolles, D., Bucksbaum, P. H., Brouard, M., Forbes, R., Weinacht, T.
2023; 130 (9): 093001
- **A plano-convex thick-lens velocity map imaging apparatus for direct, high resolution 3D momentum measurements of photoelectrons with ion time-of-flight coincidence** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Davino, M., McManus, E., Helming, N. G., Cheng, C., Mogol, G., Rodnova, Z., Harrison, G., Watson, K., Weinacht, T., Gibson, G. N., Saule, T., Trallero-Herrero, C. A.
2023; 94 (1): 013303
- **Stable excited dication: trapping on the S-1 state of formaldehyde dication after strong field ionization** *PHYSICAL CHEMISTRY CHEMICAL PHYSICS*
Singh, V., Cheng, C., Weinacht, T., Matsika, S.
2022; 24 (35): 20701-20708
- **Multi-Particle Three-Dimensional Covariance Imaging: "Coincidence" Insights into the Many-Body Fragmentation of Strong-Field Ionized D2O.** *The journal of physical chemistry letters*

Allum, F., Cheng, C., Howard, A. J., Bucksbaum, P. H., Brouard, M., Weinacht, T., Forbes, R.

2021; 8302-8308

● **Strong-field ionization of water. II. Electronic and nuclear dynamics en route to double ionization** *PHYSICAL REVIEW A*

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2021; 104 (2)

● **Momentum-resolved above-threshold ionization of deuterated water** *PHYSICAL REVIEW A*

Cheng, C., Forbes, R., Howard, A. J., Spanner, M., Bucksbaum, P. H., Weinacht, T.

2020; 102 (5)

● **Spectroscopic and Structural Probing of Excited-State Molecular Dynamics with Time-Resolved Photoelectron Spectroscopy and Ultrafast Electron Diffraction** *PHYSICAL REVIEW X*

Liu, Y., Horton, S. L., Yang, J., Nunes, J. F., Shen, X., Wolfe, T. A., Forbes, R., Cheng, C., Moore, B., Centurion, M., Hegazy, K., Li, R., Lin, et al

2020; 10 (2)