Stanford



Taran Driver

Casual - Non-Exempt, LCLS - Linac Coherent Light Source

Bio

BIO

I gained my PhD from the Blackett Laboratory Laser Consortium at Imperial College London, where my primary research project was the development of a new type of mass spectrometry for the structural analysis of protein, DNA and RNA molecules. This technology is known as two-dimensional partial-covariance mass spectrometry (2D PC MS). Here at Stanford I work at the Linac Coherent Light Source (LCLS), using the attosecond X-ray pulses produced by the newly developed XLEAP mode to study ultrafast electronic processes in molecules. We are developing and using new spectroscopic methods in the attosecond regime to observe the motion of electrons in complex molecular systems on their natural timescale. This helps us to understand how the coherent quantum dynamics of these electronic systems affect subsequent chemical motion.

Publications

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