Stanford

Matthieu Chollet

Staff Scientist, SLAC National Accelerator Laboratory

Bio

BIO

I am currently the Instrument Lead for the X-ray Correlation Spectroscopy Instrument (XCS), where I coordinate a team of scientists, as well as mechanical, controls, and data engineers. Our group is responsible for the scientific output of the XCS instrument, which supports a range of experiments, from X-ray photon correlation spectroscopy (XPCS) to ultrafast time-resolved studies in condensed matter and solution-phase chemistry.

My background is in time-resolved photoinduced phase transitions, with expertise in femtosecond time-resolved spectroscopy using ultrafast lasers. During my PhD at the Institute of Science, Tokyo, I conducted research in this field, followed by time-resolved X-ray diffraction studies at the KEK High Energy Accelerator Research Organization and the Advanced Photon Source at Argonne National Laboratory.

I joined SLAC in 2011 as a Laser Scientist for the X-ray Pump Probe (XPP) instrument and later transitioned to a Staff Scientist role at XPP before taking charge of the XCS instrument.

CURRENT ROLE AT STANFORD

X-ray Correlation Spectroscopy (XCS) instrument lead

LCLS Material Science Department

EDUCATION AND CERTIFICATIONS

- PhD, Tokyo Institute of Technology / University of Rennes 1 , Chemistry and Material Science (2006)
- B.S., University of Rennes 1 , Material Science (2003)

PATENTS

- Adams, Bernhard W,Chollet Matthieu C. "United States Patent 8611502 Continuously variable focal length lens", U.S. Department of Energy, Dec 17, 2013

LINKS

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Publications

PUBLICATIONS

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  Mangu, A., Stoica, V. A., Zheng, H., Yang, T., Zhang, M., Wang, H. H., Zu, R., Nguyen, Q. L., Song, S., Das, S., Meisenheimer, P., Donoway, E., Chollet, et al

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- **The importance of shear on the collective charge transport in CDWs revealed by an XFEL source** *SCIENCE ADVANCES*

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- **Direct observation of ultrafast cluster dynamics in supercritical carbon dioxide using X-ray Photon Correlation Spectroscopy.** *Nature communications*

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  Huang, Y., Yang, S., Teitelbaum, S., De la Pena, G., Sato, T., Chollet, M., Zhu, D., Niedziela, J. L., Bansal, D., May, A. F., Lindenberg, A. M., Delaire, O., Reis, et al
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