PSICHE: Synchrotron tomography and diffraction for in-situ experiments

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Abstract

PSICHE (Pressure, Structure and Imaging by Contrast at High Energy) is the high energy beam line of the SOLEIL synchrotron, located outside Paris. It can perform both tomography and diffraction measurements. The tomograph is optimised for in-situ materials science experiments, while diffraction is used for investigating samples at extreme conditions. A natural progression for the beam line is to combine imaging and diffraction techniques to obtain a more complete description of a sample or process. This talk will present the beam line, and describe the latest developments in these multimodal experiments.

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