

## Recent achievements and future plans of the SwissFEL

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The new SwissFEL X-Ray Free-Electron Laser facility at PSI delivers femtosecond photon pulses of coherent x-rays in the wavelength range of 0.1 to 7 nm, with extremely high peak brightness. These characteristics will provide opportunities for new experiments in chemistry, solid-state physics, biology and materials science. The first pilot experiments at the Aramis hard x-ray branch started in December 2017 and normal user operation will begin in 2018 with two dedicated end-stations. The *Alvra* end-station is focused on using time-resolved x-ray spectroscopy (XAS/XES) to investigate femtosecond chemical processes and time-resolved x-ray diffraction for serial femtosecond crystallography (SFX) experiments on proteins. The *Bernina* end-station is designed for femtosecond, time-resolved pump-probe hard x-ray diffraction and scattering experiments in condensed-matter systems. The Athos soft x-ray FEL branch is in the early phase of construction and should provide first FEL light to experiments in 2020 in the field of atomic, molecular, and optical physics (AMO), condensed matter, and non-linear x-ray science. After a detailed outline of the SwissFEL facility, we will present the recent achievements of the first pilot phase and the future plans of the project.